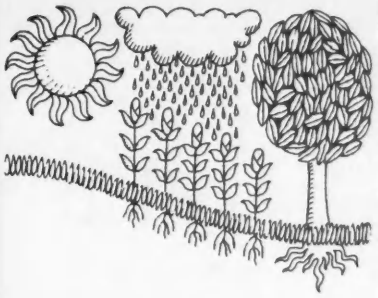
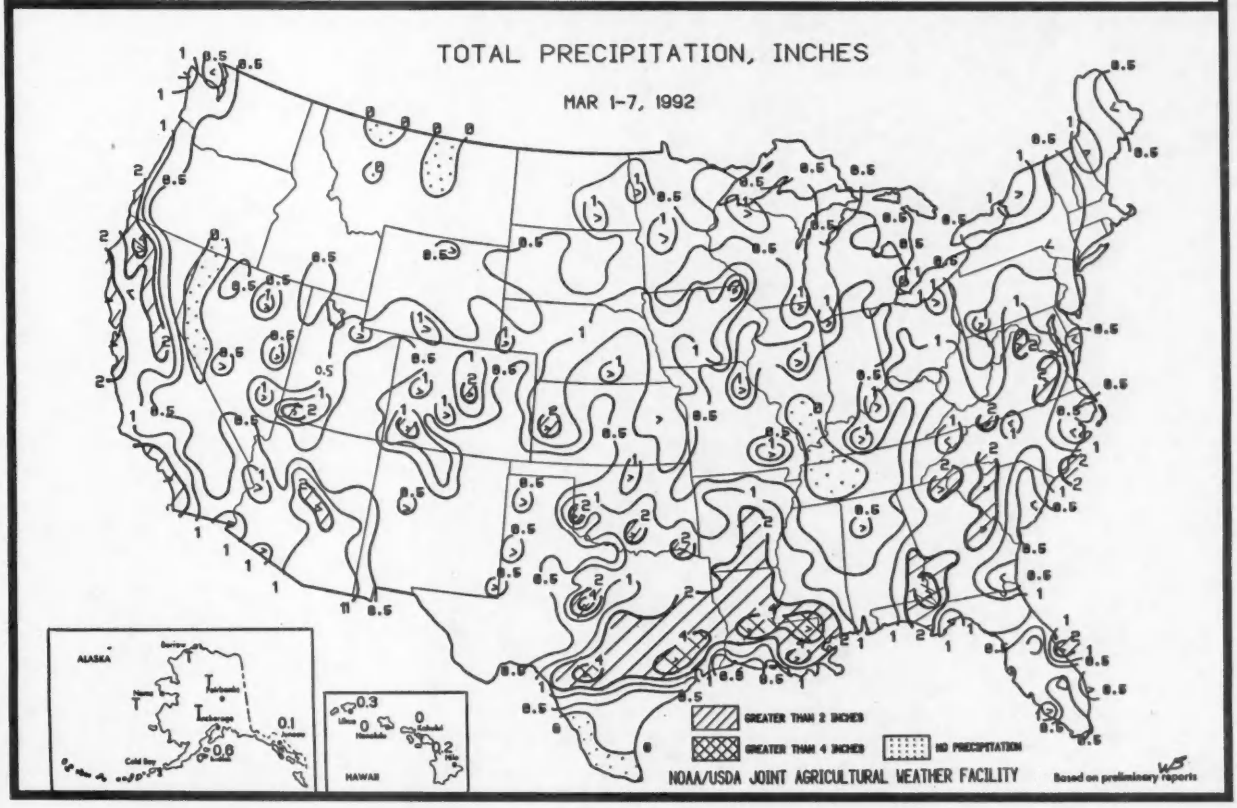


WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service and World Agricultural Outlook Board

Volume 79, No. 10 | Washington, D.C. | March 10, 1992



HIGHLIGHTS

March 1 - 7, 1992

Two spring storms generated more than a dozen tornadoes and fueled unseasonable warmth, toppling more than 130 daily record highs. Heavy rain returned to **California** after a 10-day lapse. Temperatures soared to more than 15° F above normal throughout the **northern and central Plains** and the **Midwest**. Early in the week, nearly 100 daily record highs were set from **Idaho** to **Virginia**. **Manhattan, KS**, and **St. Joseph, MO**, attained an 85° F reading. Meanwhile, rainfall increased in **southern California** and cold air punched into the **Northeast**. **San Diego, CA**, recorded more than 2 inches of rain on Monday. **Caribou, ME**, noted a low of -21° F. On Tuesday, thunderstorms erupted in the **southern Plains**. Flooding continued in, or returned to, portions of **eastern Texas**. Up to 8 inches of rain fell in the **Houston** area on Wednesday. Farther west, heavy snow buried the **central and southern Rockies**. After midweek, rain dampened most of the eastern half of the Nation, while a new storm moved into **northern California**. On Friday, thunderstorms soaked the **Piedmont of Virginia** and the **Carolinas**, while tornadoes struck parts of a corridor from **Iowa** to **Arkansas**. In **California**, up to 2 feet of new snow fell in the **Sierra Nevada**. At week's end, rain exited the **Northeast** and diminished in **California**, while colder air pushed into the **northern Plains**.

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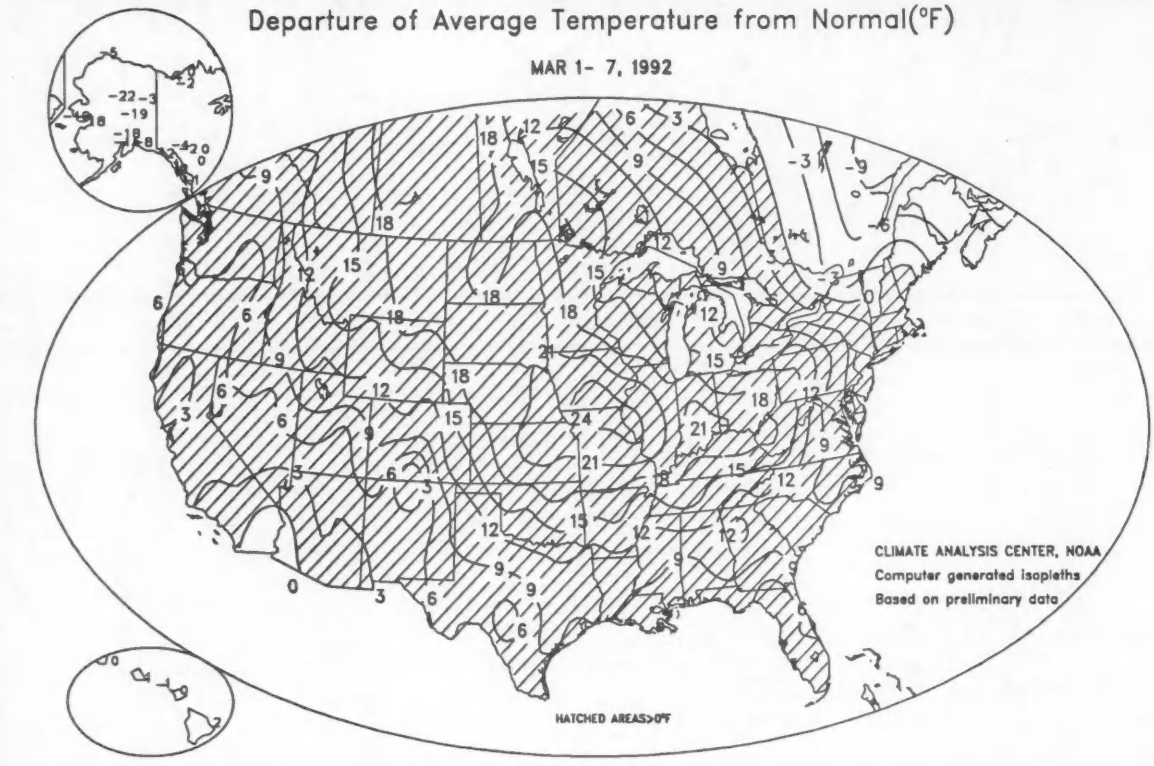
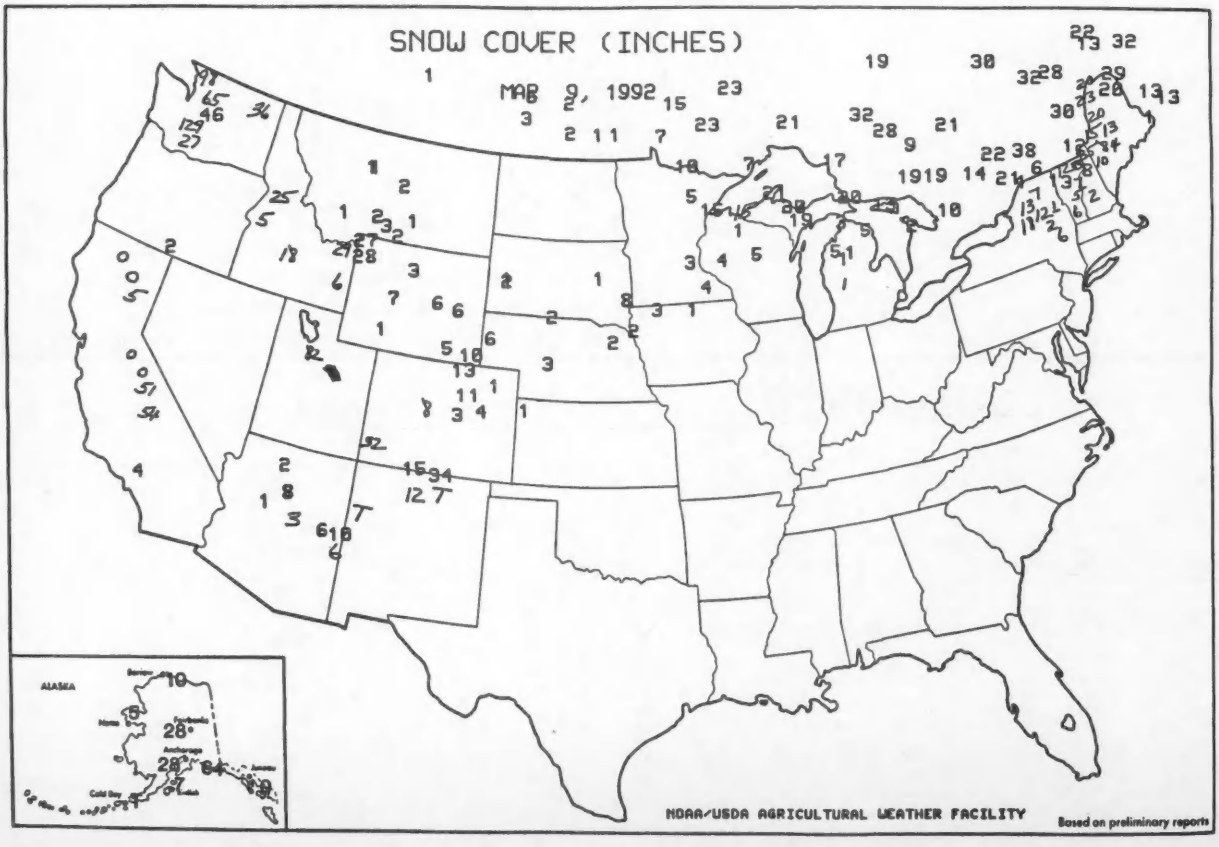
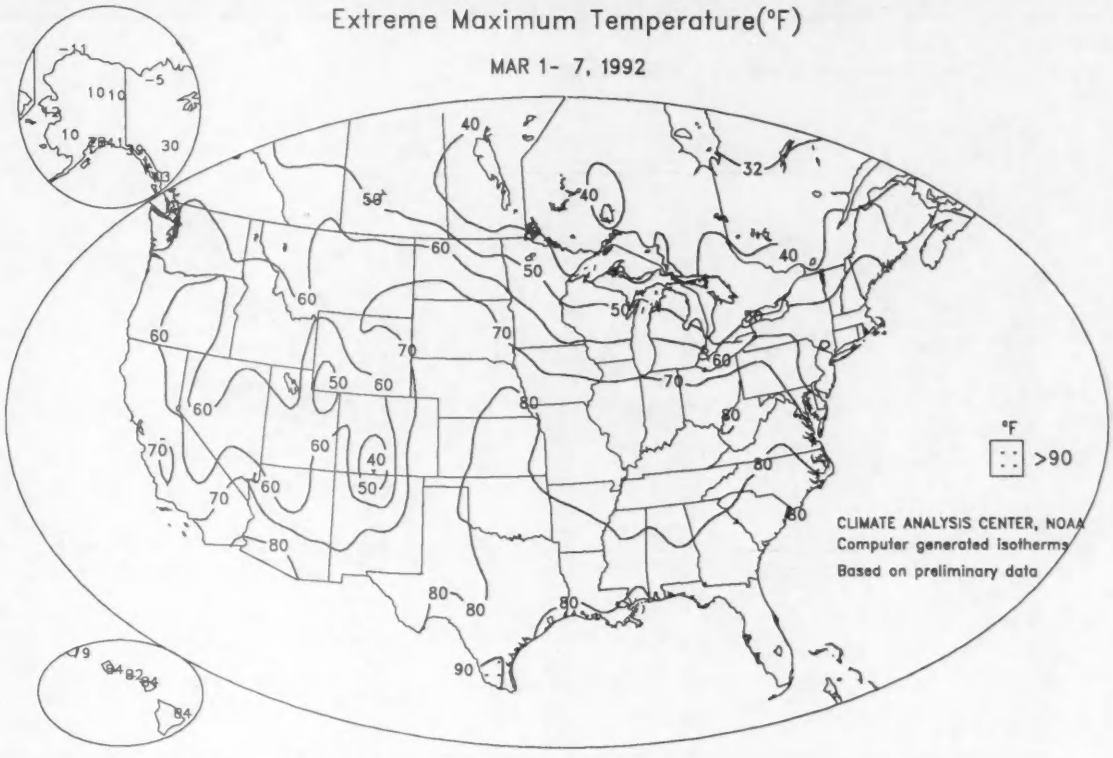
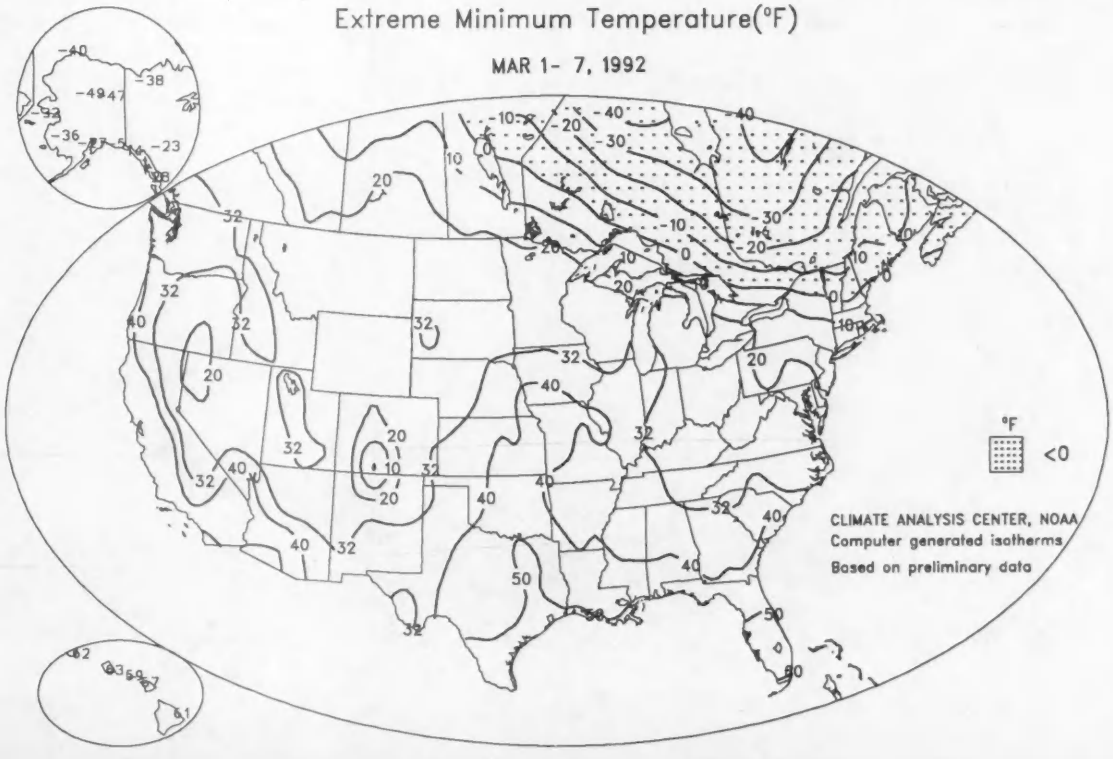

Departure of Average Temperature from Normal(°F)
MAR 1- 7, 1992
CLIMATE ANALYSIS CENTER, NOAA
Computer generated isopleths
Based on preliminary data
HATCHED AREAS>0°F

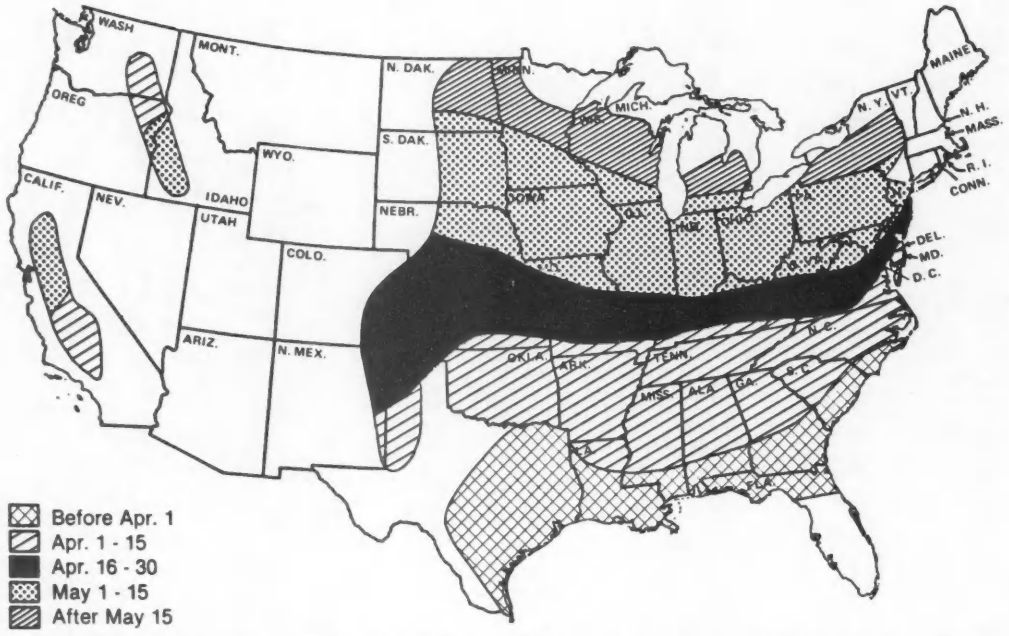

SNOW COVER (INCHES)
MAR 9, 1992
ALASKA
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


Extreme Maximum Temperature(°F)
MAR 1- 7, 1992
°F
>90
CLIMATE ANALYSIS CENTER, NOAA
Computer generated isotherms
Based on preliminary data


Extreme Minimum Temperature(°F)
MAR 1- 7, 1992
°F
<0
CLIMATE ANALYSIS CENTER, NOAA
Computer generated isotherms
Based on preliminary data

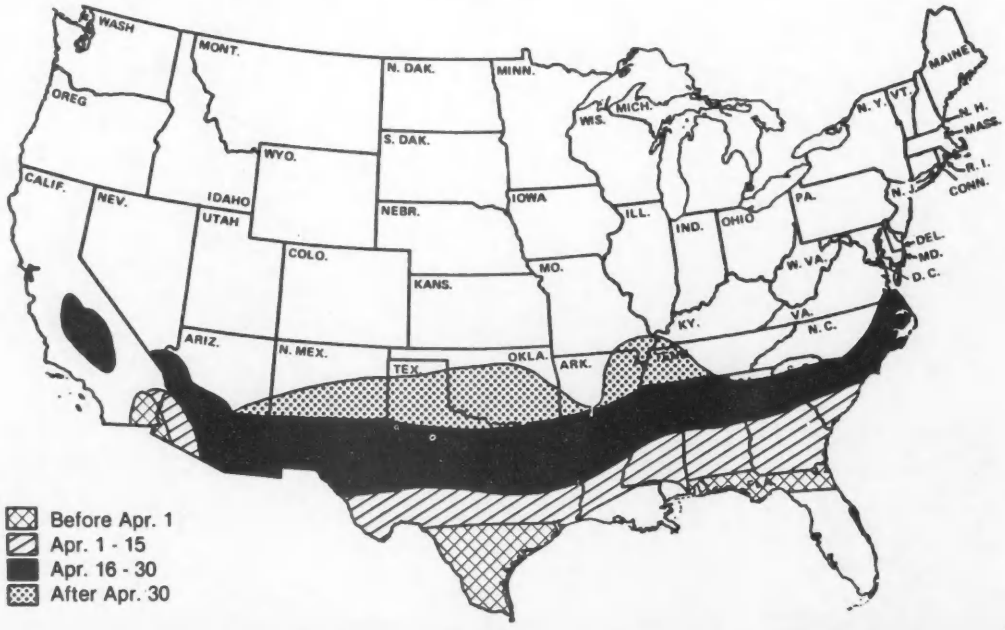
Corn for Grain

Usual Start of Planting, Principal Areas in the United States



Cotton

Usual Start of Planting, Principal Areas in the United States



National Weather Data for Selected Cities

Weather Data for the Week Ending March 7, 1992

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMP. °F		PRECIP.	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	75	48	79	38	62	11	.3	-1.1	.3	.3	23	8.1	70	92	37	0	0	2	0
MOBILE	76	54	82	49	65	7	.9	-.5	.9	.9	64	20.7	187	98	50	0	0	1	1
MONTGOMERY	78	49	81	36	63	9	.6	-.7	.6	.6	47	16.6	163	95	45	0	0	2	1
AK ANCHORAGE	13	-5	29	-16	4	-16	T	-.2	T	T	0	2.2	121	83	50	0	7	0	0
BARROW	-18	-31	-12	-40	-25	-6	T	.0	T	T	0	.2	41	75	66	0	7	0	0
FAIRBANKS	-2	-32	18	-43	-17	-20	T	-.1	T	T	36	1.6	142	82	57	0	7	1	0
JUNEAU	36	27	38	20	32	2	.4	-.4	.4	.4	52	16.4	197	89	54	0	7	2	0
KODIAK	32	18	41	11	25	-6	.6	-.4	.4	.6	59	11.8	99	87	62	0	7	3	0
NOME	-2	-27	13	-32	-14	-19	T	-.1	T	T	9	.9	64	74	54	0	7	1	0
AZ PHOENIX	72	52	78	50	62	3	.7	.5	.3	.7	384	3.3	217	83	36	0	0	5	0
PRESCOTT	55	35	62	31	45	2	.3	.1	.1	.3	158	3.9	197	83	44	0	2	3	0
TUCSON	69	45	78	41	57	1	.9	.7	.5	.9	506	3.9	242	88	36	0	0	3	0
YUMA	72	54	79	51	63	0	1.0	1.0	.7	1.0	>1000	2.2	334	**	**	0	0	2	1
AR FORT SMITH	75	50	83	39	63	15	.5	-.3	.4	.5	66	3.4	66	91	45	0	0	2	0
LITTLE ROCK	73	55	79	46	64	15	2.3	1.4	1.1	2.3	239	6.5	74	79	53	0	0	4	2
CA BAKERSFIELD	66	49	73	46	58	2	.8	.5	.4	.8	357	4.5	196	92	46	0	0	4	0
EUREKA	61	48	66	44	55	6	1.8	.6	1.1	1.8	150	9.6	71	91	66	0	0	3	2
FRESNO	65	50	71	45	58	5	.5	.1	.5	.5	133	7.2	166	87	46	0	0	1	1
LOS ANGELES	63	54	70	49	59	1	2.3	1.8	.9	2.3	491	8.6	142	91	63	0	0	4	3
REDDING	62	47	72	40	55	2	1.5	.3	.7	1.5	123	14.7	91	94	56	0	0	4	2
SACRAMENTO	63	49	66	43	56	4	1.2	.7	.8	1.2	238	8.1	108	96	61	0	0	5	1
SAN DIEGO	65	55	72	52	60	2	2.2	1.8	1.8	2.2	582	7.4	187	89	53	0	0	4	1
SAN FRANCISCO	62	51	64	46	57	4	2.3	1.6	1.3	2.3	349	10.8	125	93	65	0	0	4	2
CO DENVER	58	33	66	29	46	10	1.2	.9	1.0	1.2	523	2.4	170	77	32	0	3	3	1
GRAND JUNCTION	58	38	64	30	48	9	.4	.2	.3	.4	250	1.0	74	80	39	0	1	2	0
PUEBLO	64	31	73	21	48	10	.9	.8	.6	.9	855	1.2	189	70	28	0	4	2	1
CT BRIDGEPORT	44	29	51	15	37	2	.7	-.2	.6	.7	81	4.7	66	89	57	0	5	2	1
HARTFORD	44	26	58	12	35	2	.5	-.3	.5	.5	61	5.5	71	84	43	0	6	2	1
DC WASHINGTON	57	40	73	26	49	7	.7	-.1	.4	.7	92	5.7	92	94	62	0	1	2	0
FL APALACHICOLA	74	56	78	50	65	7	.9	.0	.9	.9	98	16.1	196	**	**	0	0	1	1
DAYTONA BEACH	78	57	80	48	67	5	.7	.0	.5	.7	99	4.8	77	98	49	0	0	3	0
JACKSONVILLE	80	55	83	42	67	8	.5	-.4	.3	.5	57	8.9	119	93	40	0	0	3	0
KEY WEST	79	70	84	65	75	2	1.9	1.6	1.8	1.9	597	3.4	84	86	63	0	0	2	1
MIAMI	81	67	88	59	74	4	.1	-.3	.1	.1	26	3.4	75	86	50	0	0	1	0
ORLANDO	82	60	86	52	71	6	T	-.8	T	T	0	3.8	61	98	44	0	0	0	0
TALLAHASSEE	80	52	84	40	66	8	.8	-.5	.5	.8	62	13.7	124	96	39	0	0	2	1
TAMPA	79	59	82	51	69	5	.1	-.8	.1	.1	10	5.2	85	96	51	0	0	1	0
WEST PALM BEACH	81	65	87	57	73	4	.9	.3	.5	.9	143	5.8	97	89	53	0	0	3	0
GA ATLANTA	75	52	80	39	63	14	.8	-.5	.4	.8	59	8.3	77	81	36	0	0	2	0
AUGUSTA	77	46	84	33	62	10	1.9	.8	1.9	1.9	171	11.0	118	98	42	0	0	2	1
MACON	78	50	83	34	64	11	1.5	.3	1.3	1.5	123	12.0	119	97	43	0	0	2	1
SAVANNAH	79	54	83	40	66	11	.6	-.3	.6	.6	67	9.4	130	90	38	0	0	2	1
HI HILO	83	64	85	61	73	2	.2	-2.9	.1	.2	5	2.8	11	86	41	0	0	2	0
HONOLULU	84	66	85	63	75	2	.0	-.8	.0	.0	0	1.8	24	85	45	0	0	0	0
KAHULUI	84	60	85	58	72	0	.0	-.7	.0	.0	0	3.0	39	90	48	0	0	0	0
LIHUE	78	66	79	62	72	0	.3	-.7	.3	.3	28	4.7	42	92	63	0	0	1	0
ID BOISE	61	37	66	34	49	10	.1	-.1	.1	.1	64	1.4	49	88	35	0	0	1	0
LEWISTON	55	39	60	37	47	6	.3	.1	.3	.3	155	1.8	70	92	61	0	0	3	0
POCATELLO	57	32	63	24	45	12	.1	-.1	.1	.1	53	1.0	45	88	38	0	3	1	0
IL CHICAGO	58	39	71	32	49	17	.4	-.1	.2	.4	81	2.7	80	98	69	0	1	3	0
MOLINE	64	43	72	34	54	22	.2	-.3	.2	.2	49	3.3	97	95	61	0	0	2	0
PEORIA	66	45	74	35	55	22	.7	.1	.6	.7	125	3.3	91	93	62	0	0	2	1
QUINCY	69	48	76	39	58	24	.2	-.4	.1	.2	27	2.2	63	83	50	0	0	2	0
ROCKFORD	60	40	67	32	50	21	.5	.1	.3	.5	116	2.8	92	96	66	0	1	3	0
SPRINGFIELD	68	46	76	39	57	22	.3	-.3	.3	.3	53	2.9	75	95	59	0	0	3	0
IN EVANSVILLE	71	47	78	31	59	18	.1	-.9	.1	.1	7	2.4	34	89	42	0	1	1	0
FORT WAYNE	62	37	69	30	50	18	.2	-.4	.1	.2	27	3.2	68	92	58	0	3	2	0
INDIANAPOLIS	70	47	77	29	59	23	.3	-.4	.2	.3	41	2.9	48	92	50	0	1	3	0
SOUTH BEND	64	40	68	33	52	20	.2	-.4	.1	.2	37	3.6	71	92	54	0	0	2	0
IA DES MOINES	67	45	77	39	56	26	1.1	.7	.5	1.1	280	4.2	167	89	56	0	0	3	0
SIOUX CITY	63	42	77	34	52	23	1.3	.9	.8	1.3	379	2.6	135	96	62	0	0	3	1
WATERLOO	56	39	65	31	47	20	1.1	.7	.7	1.1	276	3.6	167	99	78	0	2	3	1
KS CONCORDIA	68	49	79	37	59	22	.9	.5	.7	.9	242	2.5	134	88	53	0	0	3	1
DODGE CITY	71	44	80	39	58	19	1.1	.8	.9	1.1	404	1.8	145	83	29	0	0	2	1
GOODLAND	64	35	73	31	50	15	1.4	1.2	.5	1.4	690	2.1	220	82	39	0	3	3	1
TOPEKA	71	49	82	44	60	22	1.4	1.0	1.0	1.4	332	3.4	143	87	51	0	0	3	1
WICHITA	72	48	78	40	60	20	.6	.3	.6	.6	164	1.8	90	91	52	0	0	3	1
KY BOWLING GREEN	70	44	76	28	57	15	1.3	.1	1.3	1.3	111	6.4	64	89	45	0	1	2	1
LEXINGTON	70	49	75	31	59	19	.4	-.7	.2	.4	36	5.8	73	83	46	0	1	3	0
LOUISVILLE	74	49	80	31	61	20	1.3	.3	1.0	1.3	127	5.0	65	84	41	0	1	2	1
LA ALEXANDRIA	76	57	83	50	66	10	4.0	2.9	2.0	4.0	372	16.9	164	93	48	0	0	2	2
BATON ROUGE	77	54	84	45	66	8	2.3	1.2	2.3	2.3	221	19.5	182	97	53	0	0	1	1
LAKE CHARLES	75	59	76	51	67	9	1.0	.3	.7	1.0	149	16.0	183	100	67	0	0	2	1
NEW ORLEANS	76	55	79	45	66	7	3.3	2.2	3.1	3.3	295	22.0	192	100	60	0	0	2	1

Based on 1951-80 normals.

Weather Data for the Week Ending March 7, 1992

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMP. °F		PRECIP.	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	77	54	88	46	65	11	2.0	1.2	1.4	2.0	248	13.0	155	93	49	0	0	3	1
ME CARIBOU	27	0	42	-21	13	-7	.5	-.1	.5	.5	87	6.9	137	70	36	0	7	1	0
PORTLAND	40	21	54	1	30	2	.6	-.3	.6	.6	66	8.8	106	81	39	0	6	1	1
MD BALTIMORE	54	37	64	20	45	6	.9	.1	.6	.9	116	4.7	68	94	63	0	1	2	1
SALISBURY	57	38	68	20	47	6	.4	-.5	.4	.4	46	6.4	82	98	61	0	2	2	0
MA BOSTON	42	27	61	10	35	0	.7	-.2	.6	.7	75	6.1	70	86	48	0	5	3	1
CHATHAM	39	29	47	10	34	0	.6	-.3	.5	.6	67	4.2	44	91	63	0	4	4	0
MI ALPENA	38	30	43	25	34	10	.6	.3	.3	.6	172	4.0	117	96	73	0	5	3	0
DETROIT	52	36	64	29	44	13	1.0	.5	.6	1.0	194	4.3	105	88	62	0	2	2	1
FLINT	52	34	60	27	43	15	.6	.2	.4	.6	158	3.4	97	96	65	0	3	3	0
GRAND RAPIDS	52	35	59	29	43	14	.5	.1	.2	.5	110	3.1	78	98	71	0	2	3	0
HOUGHTON LAKE	45	30	53	21	38	15	.5	.1	.4	.5	124	3.1	97	92	64	0	5	3	0
LANSING	54	34	62	26	44	15	.4	-.1	.2	.4	83	3.1	89	97	64	0	4	3	0
MARQUETTE	36	24	42	12	30	11	.8	.3	.4	.8	150	4.8	106	97	90	0	7	3	0
MUSKEGON	52	36	62	31	44	15	.8	.3	.5	.8	156	3.5	76	96	67	0	2	2	0
SAULT ST. MARIE	35	25	40	11	30	10	.4	.0	.3	.4	90	4.3	100	93	64	0	5	3	0
MN ALEXANDRIA	42	33	59	27	38	19	1.3	1.1	.8	1.3	633	2.6	147	99	85	0	2	3	1
DULUTH	35	29	37	26	32	13	.8	.5	.3	.8	232	2.0	81	98	86	0	6	3	0
INT'L FALLS	38	30	41	19	34	19	.4	.1	.2	.4	167	2.7	152	98	82	0	4	3	0
MINNEAPOLIS	45	37	58	30	41	17	.4	.1	.3	.4	127	1.7	82	97	82	0	1	3	0
ROCHESTER	48	37	56	31	42	18	.3	.0	.1	.3	87	1.9	101	100	87	0	2	4	0
MS GREENWOOD	74	51	80	39	63	11	.9	-.4	.9	.9	70	6.6	59	94	46	0	0	2	1
JACKSON	76	50	83	39	63	10	1.0	-.2	1.0	1.0	84	9.1	86	96	42	0	0	1	1
MERIDIAN	74	49	82	39	61	8	.5	-.9	.5	.5	38	11.6	104	96	48	0	0	1	1
MO CAPE GIRARDEAU	72	50	75	35	61	--	T	-1.0	T	T	3	5.3	75	89	45	0	0	1	0
COLUMBIA	73	49	78	38	61	23	.4	-.3	.3	.4	58	2.9	65	86	39	0	0	3	0
KANSAS CITY	70	51	79	42	60	22	1.0	.5	.7	1.0	190	4.2	139	88	56	0	0	3	1
SAINT LOUIS	73	54	79	42	64	25	.1	-.6	.1	.1	16	3.1	67	80	45	0	0	2	0
SPRINGFIELD	71	51	75	40	61	20	.2	-.5	.1	.2	35	3.3	74	87	46	0	0	3	0
MT BILLINGS	60	37	67	31	48	17	.2	.0	.2	.2	122	.4	23	76	35	0	1	3	0
GLASGOW	53	30	64	25	42	19	.4	.4	.2	.4	683	.7	97	89	55	0	6	3	0
GREAT FALLS	54	31	61	27	43	13	T	-.2	T	T	17	.7	39	80	42	0	5	1	0
HAVRE	54	27	61	21	41	15	T	-.1	T	T	12	.2	19	84	45	0	6	1	0
HELENA	58	32	61	28	45	16	T	-.1	T	T	0	.4	31	89	40	0	5	0	0
KALISPELL	55	28	56	24	41	12	.2	.0	.1	.2	89	2.1	74	95	44	0	6	2	0
MILES CITY	57	34	70	27	46	19	.3	.2	.2	.3	255	.4	28	84	37	0	2	2	0
MISSOULA	57	31	60	26	44	12	.1	.0	.1	.1	82	.7	31	95	39	0	5	1	0
NE GRAND ISLAND	63	40	80	34	52	20	.8	.6	.4	.8	304	3.6	226	92	55	0	0	3	0
LINCOLN	67	43	81	37	55	23	.9	.5	.6	.9	239	3.2	153	91	59	0	0	3	1
NORFOLK	63	43	80	36	53	24	.7	.4	.4	.7	248	2.8	177	92	59	0	0	3	0
NORTH PLATTE	66	35	78	28	51	20	1.9	1.7	.9	1.9	935	4.2	370	95	39	0	3	4	2
OMAHA	65	48	79	43	57	24	1.6	1.3	1.0	1.6	474	4.1	206	84	63	0	0	3	2
SCOTTSBLUFF	62	31	71	25	47	14	.5	.4	.4	.5	294	2.2	214	92	35	0	4	2	0
VALENTINE	63	35	74	28	49	20	.7	.6	.6	.7	493	1.4	153	94	51	0	4	2	1
NV ELY	47	28	54	22	38	6	.9	.7	.6	.9	468	2.1	130	85	49	0	7	4	1
LAS VEGAS	64	48	71	45	56	2	.9	.8	.5	.9	836	2.7	252	84	40	0	0	2	0
RENO	57	34	61	26	46	6	.2	.0	.2	.2	105	.8	33	79	32	0	2	1	0
WINNEMUCCA	57	30	64	23	44	6	.6	.5	.4	.6	457	.9	56	83	36	0	4	3	0
NH CONCORD	42	19	59	1	31	3	.5	-.1	.5	.5	84	3.8	64	85	38	0	7	1	1
NJ ATLANTIC CITY	50	32	57	14	41	3	.7	-.2	.7	.7	81	3.8	48	95	66	0	4	2	1
NM ALBUQUERQUE	61	36	70	33	49	5	.3	.2	.3	.3	291	1.1	126	73	27	0	0	1	0
CLOVIS	69	38	76	32	54	10	.2	.1	.2	.2	191	2.4	235	76	24	0	1	1	0
ROSWELL	71	39	77	36	55	7	.1	.0	.1	.1	89	1.7	185	74	21	0	0	1	0
NY ALBANY	42	23	57	10	33	3	.2	-.4	.1	.2	33	3.4	63	86	43	0	6	3	0
BINGHAMTON	44	26	60	10	35	8	.2	-.4	.2	.2	37	3.9	70	93	61	0	4	2	0
BUFFALO	48	28	59	20	38	9	.4	-.2	.2	.4	70	4.9	81	93	55	0	5	2	0
NEW YORK	50	34	57	20	42	4	.7	-.2	.6	.7	78	3.5	49	87	55	0	1	2	1
ROCHESTER	46	26	56	18	36	7	.5	.0	.4	.5	96	3.8	73	91	59	0	5	3	0
SYRACUSE	43	25	58	16	34	5	.7	.0	.6	.7	102	5.8	97	90	54	0	5	3	1
NC ASHEVILLE	69	41	76	25	55	12	1.7	.7	1.6	1.7	162	8.5	111	92	38	0	2	2	1
CHARLOTTE	71	48	82	35	60	12	2.0	.9	2.0	2.0	179	9.5	108	79	42	0	0	1	1
GREENSBORO	69	42	81	27	56	11	.8	-.1	.8	.8	87	7.3	93	85	41	0	1	1	1
HATTERAS	67	49	76	30	58	9	1.9	.9	1.9	1.9	201	10.5	106	92	51	0	1	2	1
NEW BERN	73	46	82	29	60	10	.5	-.4	.3	.5	54	9.2	103	97	43	0	1	2	0
RALEIGH	71	44	83	26	57	11	1.5	.6	1.4	1.5	171	7.5	94	87	42	0	1	2	1
WILMINGTON	73	48	82	35	61	9	2.4	1.5	1.8	2.4	257	11.6	142	93	46	0	0	2	2
ND BISMARCK	45	32	70	27	39	17	.4	.3	.4	.4	355	1.1	105	97	74	0	3	2	0
FARGO	43	34	57	30	38	20	1.0	.9	.8	1.0	825	2.4	227	100	86	0	3	2	1
GRAND FORKS	40	32	54	27	36	20	.7	.6	.3	.7	493	1.7	121	99	82	0	3	3	0
WILLISTON	48	30	67	24	39	18	.5	.4	.3	.5	533	1.1	101	94	61	0	4	3	0
OH AKRON-CANTON	62	38	72	22	50	17	1.1	.4	.9	1.1	157	5.0	91	87	50	0	3	2	1
CINCINNATI	72	46	78	27	59	21	1.3	.5	1.0	1.3	155	5.2	77	85	41	0	1	3	1
CLEVELAND	59	35	74	26	47	14	1.0	.4	.5	1.0	157	6.9	131	89	54	0	4	2	1
COLUMBUS	68	42	75	28	55	19	.9	.2	.7	.9	130	3.5	62	90	45	0	1	2	1

Based on 1951-80 normals.

Weather Data for the Week Ending March 7, 1992

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMP. °F		PRECIP.	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Mar 1	PCT. NORMAL SINCE Mar 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	69	44	75	28	56	21	.3	-.3	.3	.3	50	4.3	81	86	42	0	1	2	0
TOLEDO	53	35	64	31	44	13	.4	-.1	.3	.4	77	3.8	86	87	58	0	3	2	0
YOUNGSTOWN	62	34	75	22	48	17	.6	-.1	.5	.6	88	4.5	79	86	50	0	4	2	1
OK OKLAHOMA CITY	74	50	82	45	62	17	.7	.2	.6	.7	159	3.1	113	89	41	0	0	2	1
TULSA	74	53	81	47	64	18	.8	.2	.8	.8	132	2.6	69	86	46	0	0	3	1
OR ASTORIA	56	43	59	37	49	5	.7	-1.0	.4	.7	41	15.7	77	99	74	0	0	5	0
BURNS	52	30	56	20	41	6	.5	.2	.3	.5	209	1.6	56	93	48	0	5	4	0
MEDFORD	60	40	66	35	50	6	.2	.2	.2	.2	48	1.7	27	97	53	0	0	3	0
PENDLETON	51	37	60	32	44	2	.2	-.1	.1	.2	80	1.6	52	97	68	0	1	3	0
PORTLAND	58	42	62	34	50	5	.4	-.4	.3	.4	49	8.9	80	99	65	0	0	4	0
SALEM	58	42	64	37	50	6	.6	-.5	.5	.6	55	9.8	77	95	61	0	0	2	0
PA ALLENTOWN	49	32	57	20	41	6	.5	-.3	.5	.5	62	3.7	51	93	56	0	3	2	0
ERIE	50	32	61	25	41	11	.4	-.2	.2	.4	65	4.9	96	89	57	0	4	2	0
HARRISBURG	52	37	62	24	45	8	.7	.0	.7	.7	95	3.4	52	89	63	0	1	1	1
PHILADELPHIA	52	35	59	24	44	5	.5	-.4	.4	.5	57	2.7	39	91	57	0	1	2	0
PITTSBURGH	65	39	77	19	52	18	.3	-.4	.3	.3	43	4.2	69	87	48	0	1	2	0
SCRANTON	50	31	59	16	40	8	.2	-.4	.1	.2	28	2.8	57	89	55	0	3	2	0
RI PROVIDENCE	47	27	62	11	37	3	1.0	.1	1.0	1.0	106	7.9	89	86	44	0	5	2	1
SC CHARLESTON	78	54	83	45	66	12	.4	-.6	.4	.4	40	7.6	98	89	42	0	0	1	0
COLUMBIA	75	47	84	34	61	10	1.0	-.2	.9	1.0	84	8.3	86	95	45	0	0	2	1
FLORENCE	74	49	83	38	61	10	.2	-.8	.2	.2	19	5.6	71	92	45	0	0	1	0
GREENVILLE	72	46	80	30	59	11	1.9	.5	1.8	1.9	140	10.5	103	84	45	0	1	2	1
SD ABERDEEN	50	35	73	27	43	20	.4	.3	.3	.4	253	1.6	120	99	77	0	3	3	0
HURON	55	35	74	27	45	21	.6	.4	.3	.6	259	2.5	174	97	68	0	4	3	0
RAPID CITY	60	38	74	34	49	20	.7	.6	.5	.7	435	1.2	100	82	48	0	0	3	1
SIOUX FALLS	56	37	68	32	47	21	1.0	.7	.5	1.0	333	3.5	199	99	74	0	2	3	1
TN CHATTANOOGA	73	44	77	30	58	12	.3	-1.1	.3	.3	24	9.3	81	99	40	0	1	2	0
KNOXVILLE	70	44	76	28	57	11	1.2	.0	1.0	1.2	98	8.4	83	91	43	0	1	2	1
MEMPHIS	74	51	79	35	62	14	.6	-.6	.3	.6	51	4.6	45	95	44	0	0	3	0
NASHVILLE	73	48	78	31	61	15	T	-1.2	T	T	0	5.6	56	88	41	0	1	0	0
TX ABILENE	73	49	78	47	61	9	.3	.1	.3	.3	163	5.8	264	80	37	0	0	1	0
AMARILLO	70	38	78	34	54	11	.4	.2	.4	.4	205	1.2	96	81	25	0	0	1	0
AUSTIN	76	55	85	48	65	8	2.2	1.8	1.5	2.2	584	13.6	303	96	57	0	0	3	2
BEAUMONT	77	59	80	48	68	10	.3	-.4	.2	.3	40	17.8	195	99	64	0	0	2	0
BROWNSVILLE	81	64	85	57	73	6	T	-.1	T	T	0	5.5	189	97	63	0	0	0	0
CORPUS CHRISTI	79	63	89	54	71	8	.2	.0	.1	.2	117	9.8	299	99	63	0	0	3	0
DEL RIO	78	55	83	47	67	6	1.9	1.8	1.4	1.9	>1000	7.6	499	72	35	0	0	2	1
EL PASO	70	44	79	39	57	5	.1	.1	.1	.1	175	1.4	160	67	23	0	0	2	0
FORT WORTH	76	53	85	49	65	11	1.0	.5	.6	1.0	218	6.6	164	90	44	0	0	2	1
GALVESTON	70	62	71	60	66	7	.5	.0	.5	.5	104	17.3	295	100	81	0	0	2	0
HOUSTON	77	60	82	53	68	10	4.6	4.0	4.6	4.6	762	18.3	245	96	56	0	0	2	1
LUBBOCK	72	44	80	38	58	11	.3	.1	.3	.3	153	3.6	322	85	30	0	0	1	0
MIDLAND	73	44	78	39	59	6	.2	.1	.2	.2	155	3.9	368	81	31	0	0	1	0
SAN ANGELO	74	48	79	41	61	7	.5	.3	.4	.5	336	6.2	381	90	39	0	0	2	0
SAN ANTONIO	76	54	83	47	65	6	3.8	3.5	2.5	3.8	>1000	15.8	430	94	55	0	0	3	2
VICTORIA	79	62	89	50	71	10	.1	-.3	.0	.1	16	14.1	318	98	60	0	0	2	0
WACO	77	55	83	45	66	11	1.8	1.4	1.0	1.8	469	12.6	305	94	49	0	0	2	2
WICHITA FALLS	77	50	84	41	63	13	.3	.0	.2	.3	103	3.3	144	89	39	0	0	2	0
UT CEDAR CITY	51	34	59	30	43	6	.8	.6	.5	.8	364	2.3	138	92	51	0	1	5	0
SALT LAKE CITY	58	40	64	39	49	11	.1	-.3	.1	.1	26	2.1	70	83	41	0	0	3	0
VT BURLINGTON	35	10	44	-7	23	-2	.4	.0	.3	.4	91	3.6	89	92	50	0	6	3	0
VA NORFOLK	62	42	72	27	52	7	.3	-.6	.2	.3	32	6.8	86	94	54	0	1	2	0
RICHMOND	64	42	76	23	53	9	3.7	2.9	3.1	3.7	456	8.2	113	91	56	0	1	2	2
ROANOKE	68	45	80	30	56	14	.9	.0	.8	.9	104	7.1	103	79	46	0	1	2	1
WA QUILLAYUTE	56	45	60	40	51	8	1.3	-1.6	.4	1.3	46	32.5	109	100	74	0	0	6	0
SEATTLE-TACOMA	55	44	62	39	50	6	.6	-.3	.2	.6	70	11.5	103	99	72	0	0	4	0
SPOKANE	52	35	59	30	44	8	.3	-.1	.2	.3	85	4.2	94	97	61	0	2	4	0
YAKIMA	56	39	63	34	47	8	.1	.0	.1	.1	100	1.0	46	94	57	0	0	1	0
WV BECKLEY	66	45	72	25	56	18	1.1	.2	.6	1.1	122	5.3	70	69	41	0	1	2	2
CHARLESTON	73	47	83	28	60	19	1.5	.6	.8	1.5	168	6.1	81	76	38	0	1	2	2
HUNTINGTON	73	48	80	28	60	19	.6	-.3	.3	.6	66	4.6	65	76	36	0	1	2	0
PARKERSBURG	70	43	79	24	56	17	1.6	.8	1.1	1.6	208	4.3	68	85	40	0	1	2	2
WI GREEN BAY	41	33	53	30	37	13	.6	.2	.3	.6	166	1.9	72	99	82	0	4	3	0
LACROSSE	48	36	61	32	42	16	.8	.5	.6	.8	242	2.5	115	98	73	0	2	2	1
MADISON	51	36	61	26	43	16	.4	.0	.1	.4	92	2.5	97	98	76	0	1	4	0
MILWAUKEE	45	36	64	33	41	12	.6	.1	.2	.6	126	3.2	93	99	80	0	0	3	0
WAUSAU	42	32	54	27	37	15	.8	.5	.6	.8	240	2.1	92	100	82	0	4	3	1
WY CASPER	57	33	65	24	45	15	.4	.2	.2	.4	194	.9	71	81	36	0	3	2	0
CHEYENNE	54	31	64	26	43	13	.7	.5	.7	.7	384	1.2	120	78	36	0	4	1	1
LANDER	55	33	61	30	44	15	.4	.2	.4	.4	228	1.1	82	79	36	0	2	2	0
SHERIDAN	60	35	69	31	48	18	.3	.1	.3	.3	163	.6	32	81	34	0	3	2	0

Based on 1951-80 normals.

HEATING DEGREE DAYS (Base 65° F)

March 1 - 7, 1992

(Cumulative totals and departures from normal are for the period July 1, 1991 - March 7, 1992)

STATES AND STATIONS	WEEKLY TOTAL	WEEKLY DEPARTURE	CUMULATIVE TOTAL	CUMULATIVE DEPARTURE	CUMULATIVE DEP fm 90-91
AL BIRMINGHAM	24	-79	2141	-325	116
MOBILE	7	-53	1441	-88	267
MONTGOMERY	16	-71	1824	-185	227
AK ANCHORAGE	422	111	7685	-420	-401
BARROW	621	31	14416	265	551
FAIRBANKS	569	128	11000	-261	292
JUNEAU	233	-12	5698	-919	-589
KODIAK	277	36	5974	-192	-199
NOME	550	123	9718	-421	140
AZ FLAGSTAFF	189	-38	4737	-466	-160
PHOENIX	23	-30	737	-526	-1
PRESCOTT	139	-29	3292	-379	-93
TUCSON	53	-12	1238	-229	83
WINSLOW	134	-25	4047	152	-8
YUMA	5	-29	450	-430	-136
AR FORT SMITH	16	-112	2455	-526	-300
LITTLE ROCK	11	-104	2288	-436	-154
CA BAKERSFIELD	48	-18	1769	-1	-14
EUREKA	72	-41	2612	-551	-187
FRESNO	51	-34	1891	-272	-90
LOS ANGELES	44	-12	669	-420	-83
REDDING	68	-23	1930	-200	-67
SACRAMENTO	63	-28	1937	-237	-65
SAN DIEGO	32	-17	579	-329	-195
SAN FRANCISCO	57	-34	1702	-513	-50
STOCKTON	60	-29	1953	-206	-70
CO DENVER	135	-70	4314	-242	21
GRAND JCT.	119	-67	4636	27	-443
PUEBLO	121	-68	4225	-93	25
CT BRIDGEPORT	195	-19	3887	-294	320
HARTFORD	208	-21	4461	-396	354
DE WILMINGTON	146	-45	3507	-463	215
DC WASHINGTON	112	-51	3023	-365	280
FL APALACHICOLA	7	-48	1116	-156	325
DAYTONA BEACH	4	-34	637	-176	232
FORT MYERS	0	-16	188	-232	87
JACKSONVILLE	5	-47	1107	-171	272
KEY WEST	0	-5	14	-100	03
MIAMI	0	-7	55	-136	16
ORLANDO	0	-25	432	-186	157
TALLAHASSEE	7	-54	1359	-122	317
TAMPA	0	-30	470	-216	207
W. PALM BEACH	0	-12	133	-124	55
GA ATLANTA	20	-93	2034	-541	-16
AUGUSTA	28	-67	1965	-269	196
MACON	20	-64	1784	-233	138
SAVANNAH	8	-66	1376	-344	188
ID BOISE	113	-67	4044	-404	-638
LEWISTON	125	-43	3654	-538	152
POCATELLO	139	-87	4961	-416	-392
IL CHICAGO	111	-125	4644	-432	-174
MOLINE	77	-163	4561	-666	-421
PEORIA	68	-161	4363	-656	-371
QUINCY	44	-172	4081	-618	-323
ROCKFORD	103	-150	4894	-623	-405
SPRINGFIELD	55	-157	3967	-625	-360
IN EVANSVILLE	40	-136	3379	-535	-115
FORT WAYNE	106	-126	4415	-575	-81
INDIANAPOLIS	43	-165	3859	-696	-264
SOUTH BEND	91	-145	4471	-520	-61
IA DES MOINES	61	-184	4600	-698	-411
DUBUQUE	118	-149	5284	-565	-376
SIOUX CITY	88	-166	4861	-763	-442
WATERLOO	122	-151	5296	-726	-494
KS CONCORDIA	45	-160	3770	-780	-350
DODGE CITY	50	-135	3602	-489	-216
GOODLAND	105	-110	4186	-549	-208
TOPEKA	36	-157	3578	-798	-381
WICHITA	33	-143	3272	-690	-346
KY BOWLING GREEN	54	-106	3089	-496	-17
LEXINGTON	39	-140	3373	-545	-43
LOUISVILLE	26	-144	3048	-680	-150
LA ALEXANDRIA	0	-73	1505	-252	-95
BATON ROUGE	7	-53	1277	-244	25
LAKE CHARLES	3	-55	1223	-208	-46
NEW ORLEANS	9	-44	1234	-120	211
SHREVEPORT	8	-78	1717	-289	-177
ME CARIBOU	361	39	7248	-32	327
PORTLAND	242	-18	5276	-350	504
MD BALTIMORE	136	-46	3573	-210	432
SALISBURY	121	-51	3222	-300	269
MA BOSTON	210	-3	4094	-185	447
CHATHAM	216	-2	4001	-283	357
MI ALPENA	217	-84	5790	-481	65
DETROIT	143	-99	4544	-565	10
FLINT	151	-112	4964	-461	-64
GRAND RAPIDS	149	-108	4912	-437	-43
HOUGHTON LAKE	191	-107	5693	-592	-169
LANSING	145	-114	5042	-361	-7
MARQUETTE	244	-80	6872	-245	-109
MUSKEGON	147	-110	4797	-468	-47
SAULT ST MARIE	242	-80	6518	-383	-105
MN ALEXANDRIA	191	-135	6457	-748	-210
DULUTH	231	-100	7057	-480	-194
INT'L FALLS	219	-136	7488	-742	-358
MINNEAPOLIS	167	-123	5911	-465	-102
ROCHESTER	158	-138	6079	-442	-169
SAINT CLOUD	196	-119	6466	-594	-219
MS GREENWOOD	20	-79	1998	-376	-33
JACKSON	16	-75	1810	-293	12
MERIDIAN	27	-66	1835	-335	144
MO CAPE GIRARDEAU	29	-133	3047	-650	-303
COLUMBIA	26	-168	3655	-601	-248
KANSAS CITY	32	-164	3757	-581	-323
SAINT LOUIS	14	-170	3243	-828	-269
SPRINGFIELD	28	-143	3212	-602	-265
MT BILLINGS	114	-122	4447	-1028	-551
GLASGOW	161	-146	5607	-1365	-817
GREAT FALLS	155	-97	4754	-1083	-707
HAVRE	169	-115	5412	-1303	-682
HELENA	141	-111	5501	-665	-61
KALISPELL	166	-85	5487	-825	-559
MILES CITY	133	-132	4847	-1345	-791
MISSOULA	145	-90	5200	-738	-490
NE GRAND ISLAND	91	-143	4338	-883	-376
LINCOLN	70	-163	4237	-943	-426
NORFOLK	82	-172	4672	-966	-506
NORTH PLATTE	97	-141	4512	-914	-445
OMAHA	57	-171	4443	-615	-473
SCOTTSBLUFF	127	-97	4575	-594	-430
VALENTINE	110	-151	4973	-765	-486
NV ELY	191	-45	5156	-450	-164
LAS VEGAS	65	-19	1872	-289	-93
RENO	134	-47	3640	-829	-455
WINNEMUCCA	149	-45	4223	-541	-674
NH CONCORD	239	-24	5350	-402	298
NJ ATLANTIC CITY	164	-31	3713	-240	290
NM ALBUQUERQUE	114	-39	3451	-171	35
CLOVIS	80	-68	3302	-35	350
ROSWELL	70	-38	2855	139	430
NY ALBANY	227	-28	5034	-367	354
BINGHAMTON	206	-62	5048	-545	69
BUFFALO	185	-70	4785	-385	259
NEW YORK	159	-37	3365	-486	326
ROCHESTER	202	-52	4920	-220	281
SYRACUSE	216	-39	4945	-265	291
NC ASHEVILLE	65	-90	2984	-488	51
CAPE HATTERAS	48	-69	1710	-445	170
CHARLOTTE	36	-92	2182	-641	53
GREENSBORO	63	-84	2670	-550	117
NEW BERN	41	-70	1980	-442	148
RALEIGH-DURHAM	54	-83	2467	-489	157
WILMINGTON	34	-65	1848	-279	241
ND BISMARCK	183	-127	6029	-1089	611
FARGO	185	-146	6501	-867	-332
GRAND FORKS	201	-143	6820	-916	-394
WILLISTON	181	-132	6037	-1190	-642
OH AKRON-CANTON	102	-128	4403	-459	133
CLEVELAND	126	-104	4246	-541	-25
COLUMBUS	69	-139	3911	-630	-16
CINCINNATI	40	-154	3655	-589	-36
DAYTON	58	-153	4076	-473	-4
TOLEDO	145	-95	4489	-644	-52
YOUNGSTOWN	116	-124	4487	-583	109
OK OKLAHOMA CITY	19	-120	2574	-587	-243
TULSA	9	-129	2467	-713	-302
OR ASTORIA	109	-38	3205	-401	-188
BURNS	166	-44	4887	-256	-610
MEDFORD	103	-43	2912	-676	-584
PENDLETON	144	-16	3634	-421	-365
PORTLAND	104	-36	2733	-707	-432
SALEM	104	-43	2890	-675	-421
PA ALLENTOWN	170	-47	4069	-522	156
ERIE	164	-87	4312	-758	195
HARRISBURG	141	-61	3813	-451	162
PHILADELPHIA	147	-44	3425	-530	287
PITTSBURGH	87	-131	4107	-592	142
SCRANTON	171	-63	4535	-418	307
RI PROVIDENCE	196	-26	4029	-492	237
SC CHARLESTON	7	-78	1463	-419	176
COLUMBIA	28	-72	1982	-305	150
FLORENCE	28	-70	1832	-388	123
GREENVILLE	44	-79	2373	-368	15
SD ABERDEEN	156	-145	5809	-982	-474
HURON	137	-150	5440	-993	-536
RAPID CITY	110	-140	4678	-897	-616
SIOUX FALLS	128	-152	5465	-810	-430
TN CHATTANOOGA	45	-87	2577	-445	129
KNOXVILLE	52	-82	2785	-298	104
MEMPHIS	18	-104	2292	-469	-41
NASHVILLE	29	-111	2712	-452	06
TX ABILENE	26	-66	2256	-34	81
AMARILLO	73	-80	3315	-147	-14
AUSTIN	5	-58	1287	-300	-109
BEAUMONT	2	-49	1164	-183	-19
BROWNSVILLE	0	-21	542	-38	32
CORPUS CHRISTI	0	-34	746	-158	-32
DEL RIO	1	-46	1182	-221	17
EL PASO	52	-38	2194	-161	51
FORT WORTH	7	-80	1805	-230	-186
GALVESTON	0	-51	931	-202	-2
HOUSTON	1	-55	1231	-174	-44
LUBBOCK	47	-82	2784	-195	116
MIDLAND-ODESSA	42	-52	2428	101	196
SAN ANGELO	26	-57	2010	-45	-49
SAN ANTONIO	4	-52	1239	-224	-120
VICTORIA	1	-46	948	-220	-113
WACO	3	-77	1604	-284	-184
WICHITA FALLS	12	-97	2267	-346	-155
UT BLANDING	110	-90	4163	-548	-385
CEDAR CITY	154	-43	4288	-240	-469
SALT LAKE CITY	109	-81	4294	-224	-347
VT BURLINGTON	293	4	5868	-244	602
VA LYNCHBURG	78	-85	3069	-474	88
NORFOLK	89	-52	2452	-370	306
RICHMOND	83	-70	2801	-490	229
ROANOKE	62	-97	3029	-502	201
WA COLVILLE	157	-56	4817	-659	-458
QUILLAYUTE	99	-62	3496	-621	-328
SEATTLE-TACOMA	105	-47	2932	-746	-462
SPOKANE	149	-58	4514	-700	-516
YAKIMA	123	-54	4032	-654	-565
WV BECKLEY	65	-132	4142	-266	520
CHARLESTON	37	-134	3262	-565	148
HUNTINGTON	33	-137	3298	-519	05
PARKERSBURG	58	-126	3693	-311	206
WI GREEN BAY	193	-99	5664	-629	-242
LA CROSSE	157	-120	5517	-498	-162
MADISON	149	-124	5310	-690	-298
MILWAUKEE	167	-94	4798	-781	-144
WAUSAU	193	-111	6240	-430	-102
WY CASPER	139	-111	5039	-657	-412
CHEYENNE	155	-90	4867	-472	-308
LANDER	143	-107	5667	-312	-27
SHERIDAN	120	-131	5002	-905	-504

Based on 1951-80 normals.

February Weather and Crop Summary

California Drought Update

As February began, California was in the midst of a sixth consecutive water year (October 1 - September 30) of drought. Sierra Nevada snowpack, which is the primary source of the State's reservoir water, stood at 45 percent of normal. But between the 5th and the 21st, moisture repeatedly washed across the State, at first causing major flooding northwest of Los Angeles, but eventually supplying precious snowfall to the Sierra Nevada. When the storminess subsided, the snowpack attained a moisture level of more than 70 percent of normal. But exceptionally warm weather during the final week of February started spring snowmelt early, reducing the snowpack to 64 percent of normal by March 2, according to the California Drought Information Center. In the northern third of the Sierra Nevada, which had less snowmelt, the early March snowpack is 76 percent of normal.

Climatologically, precipitation has already begun to dwindle in California. Approximately 25 percent of the total normal annual precipitation falls between March 1 and May 31, and 60 percent of that 3-month total falls during March. Rainfall totals are scant during the summer months. Therefore, barring an exceptionally wet March, major water storage areas of California will soon conclude a sixth consecutive year of precipitation shortfalls.

Weather

Elsewhere, heavy rain plagued Texas for the third month in a row, keeping river and flash flooding an active threat in the eastern part of the State. February rainfall records fell in Austin, TX (6.56 inches), and Galveston, TX (8.34 inches). Rainfall was above normal for a second consecutive month along the central Gulf coast. Since January 1, 1992, twice the normal amount of rain has fallen across the southern tiers of Louisiana, Mississippi, Alabama, and extreme western Florida. Farther north, the storms that lashed California also deposited unseasonably heavy precipitation from northern Kansas to the western Corn Belt. But two areas that head into the spring months with long-term and topsoil moisture deficits are the northern High Plains and the eastern Corn Belt. In eastern Montana, both February and winter precipitation was less than 25 percent of normal.

Exceptionally mild weather blanketed the northern and central Plains during February, continuing a trend that began in early December. In fact, only northern Maine and the San Luis Valley of Colorado reported cooler-than-normal weather. Notable warm spells opened and closed the month. More than 40 daily record highs were established during the first 4 days of the month, and more than 100 records fell during the month's final 10 days. On the 1st, Dickinson, ND, established a February high temperature record (68° F), while on the 29th, Bismarck, ND (69° F), and Pocatello, ID (65° F), set monthly record highs. The lowest temperature reported at Havre, MT, during the month was 3° F, which is barely below the normal monthly average temperature of 11° F. Only the Northeast had occasional intrusions of arctic air.

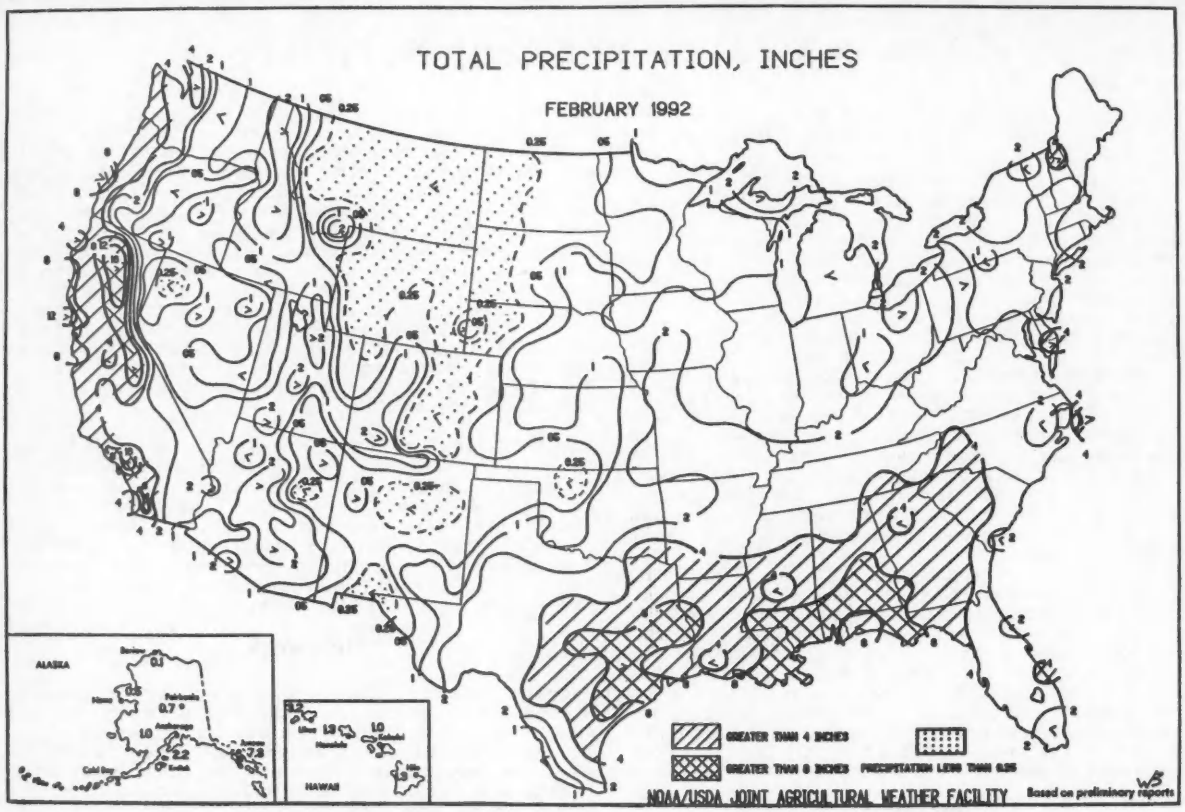
Snowfall was common only in the Great Lakes States and New England as Canadian storms (termed Alberta Clippers) and remnants of California's storms traversed the region. Elsewhere east of the Rockies, snow generally melted within a day or two after falling. Though the majority of winter grain areas had no snow cover for a third month in a row, unseasonably warm weather prevented any major winter kill.

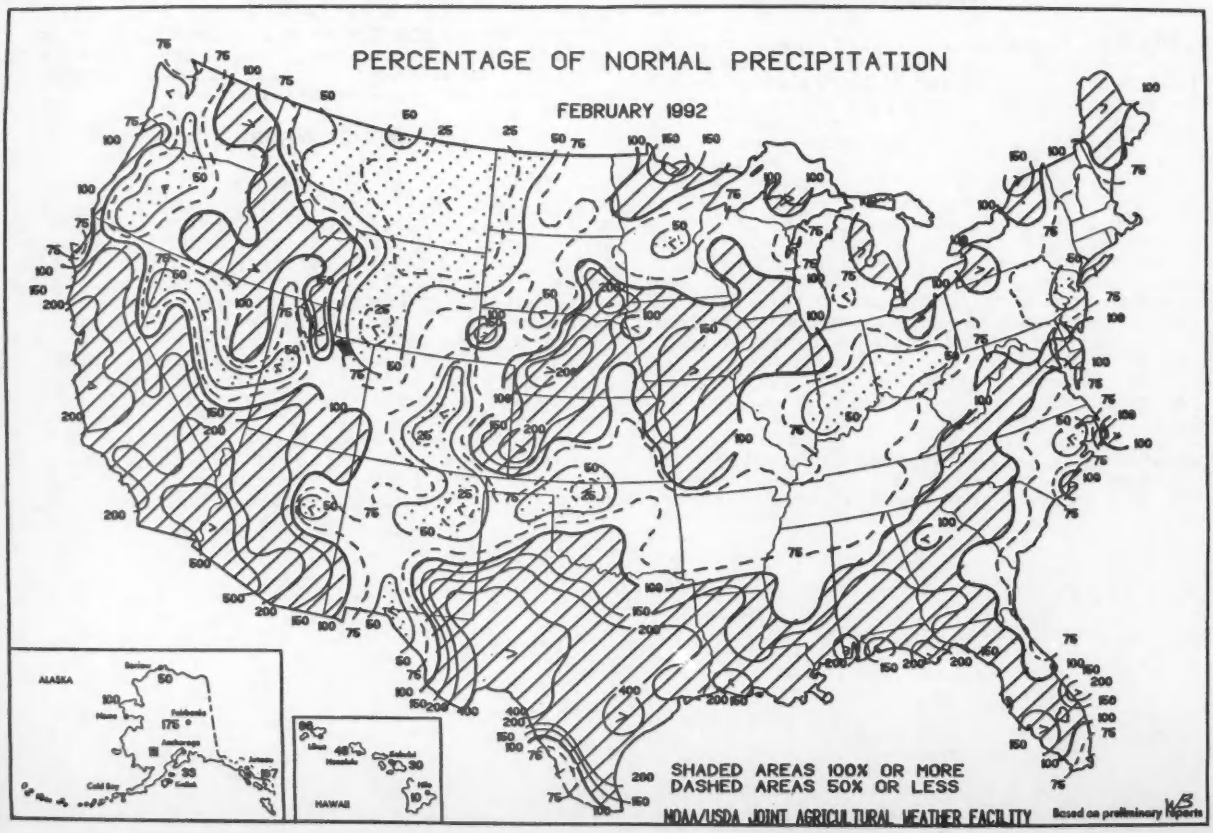
Fieldwork

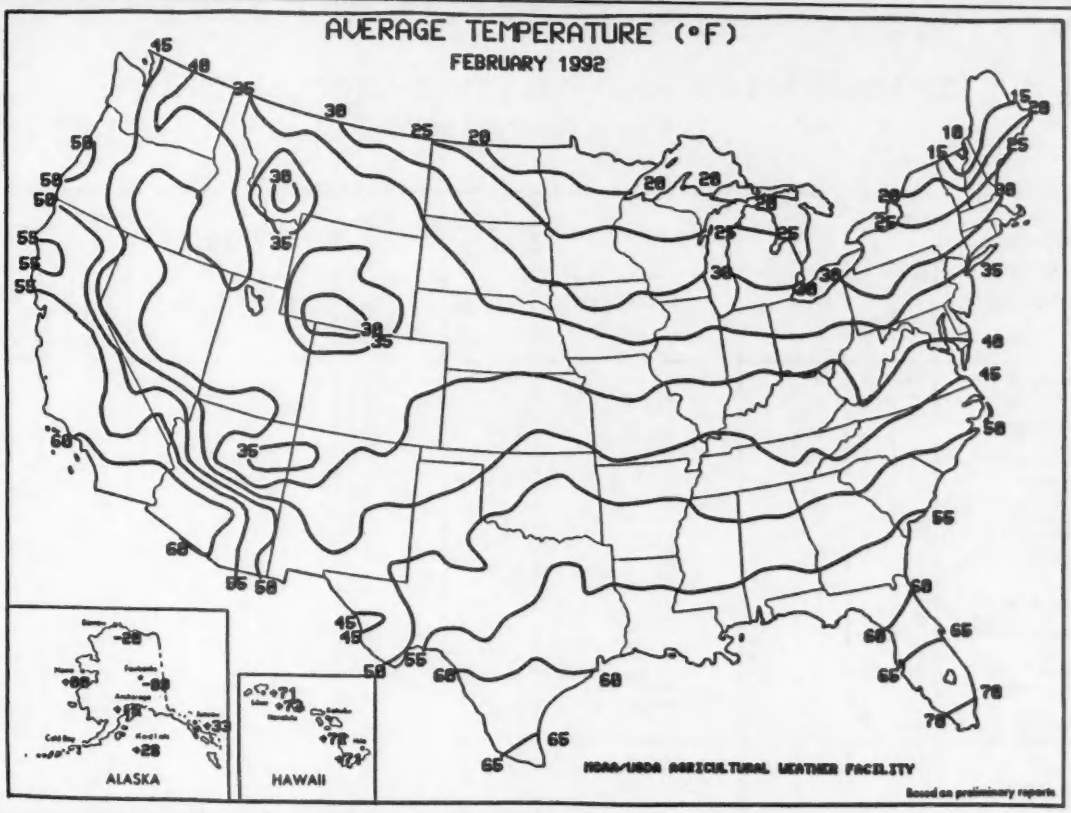
Preparations for spring planting were underway across the southern latitudes early in the month, and intensified across the Nation in response to the unseasonably warm weather. Cotton planting was underway in southwestern Arizona, southern Texas, and the Rio Grande Valley, while harvest was winding down in Oklahoma. Some corn and sorghum fields were planted in the Texas Blacklands and Rio Grande Valley as fields dried sufficiently for entry, and corn planting continued in southern Georgia. Oats were being sown in southeastern Nebraska.

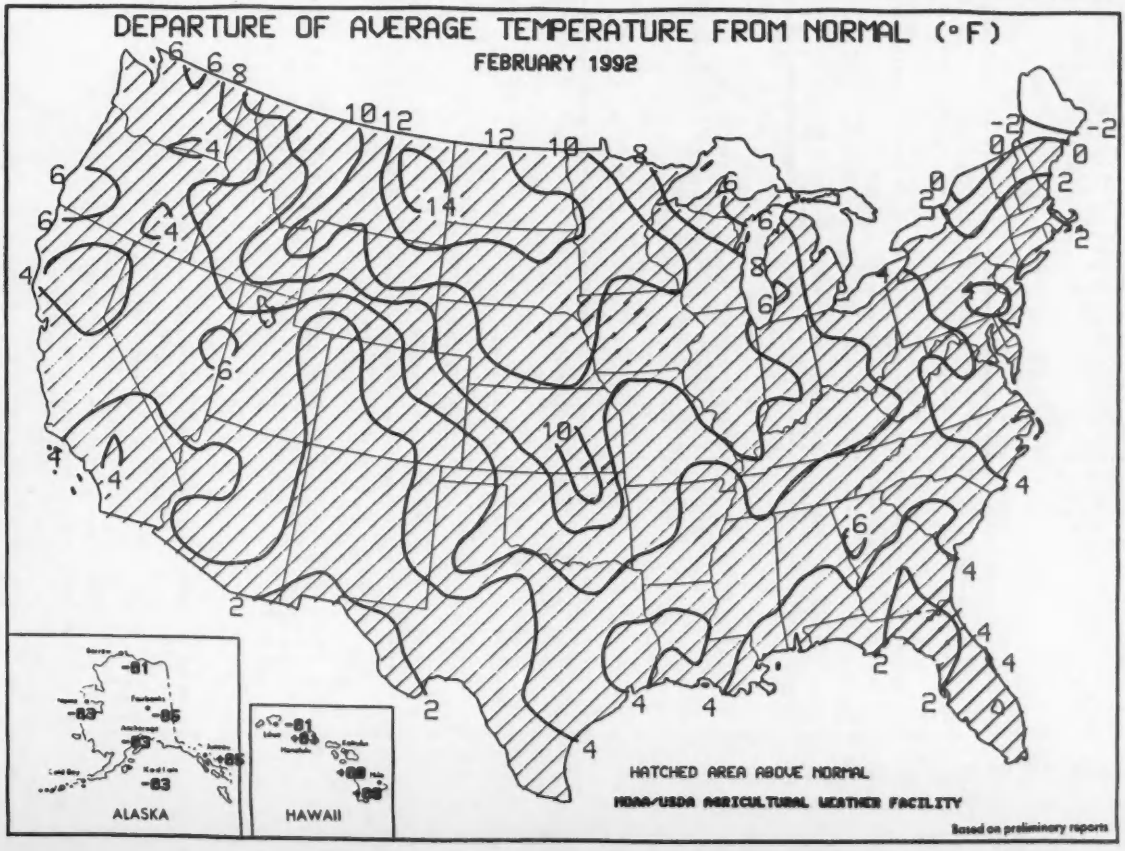
Winter Wheat

One effect of the above-normal temperatures during the latter half of winter was the unusually early greening of fall-seeded grains. Winter wheat from the Rocky Mountains through the Ohio Valley was leaving dormancy and beginning to green by late February, increasing the vulnerability of the crop to freeze. Snow cover was lacking in most wheat-producing regions throughout the winter, and remained so entering Spring. Surplus moisture caused some yellowing of winter wheat in eastern Texas and the Delta, and some Arkansas producers were resorting to aerial application of fertilizers due to wet field conditions. Topdressing fertilizers were also being applied to fields in the Southwest and Southeast. Most regions reported wheat condition as fair to good entering Spring.


TOTAL PRECIPITATION, INCHES
FEBRUARY 1992
ALASKA
HAWAII
GREATER THAN 4 INCHES
GREATER THAN 8 INCHES
PRECIPITATION LESS THAN 0.25
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


PERCENTAGE OF NORMAL PRECIPITATION
FEBRUARY 1992
ALASKA
HAWAII
SHADED AREAS 100% OR MORE
DASHED AREAS 50% OR LESS
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


AVERAGE TEMPERATURE (°F)
FEBRUARY 1992
ALASKA
HAWAII
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
FEBRUARY 1992
HATCHED AREA ABOVE NORMAL
ALASKA
HAWAII
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

TEMPERATURE AND PRECIPITATION SUMMARY
February 1992

STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.		STATES AND STATIONS	Temp. °F		Precip.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	51	4	4.0	-0.7	LA ALEXANDRIA	56	3	6.0	1.3	TOLEDO	32	6	1.7	-0.1
HUNTSVILLE	48	4	3.2	-1.6	BATON ROUGE	58	5	7.5	2.6	YOUNGSTOWN	32	5	1.7	-0.5
MOBILE	57	3	9.9	5.0	LAKE CHARLES	59	5	3.9	0.0	OK OKLAHOMA CITY	50	9	1.3	0.0
MONTGOMERY	54	4	8.2	3.7	NEW ORLEANS	58	4	8.7	3.5	TULSA	50	9	1.3	-0.4
AK ANCHORAGE	15	-3	1.0	0.2	SHREVEPORT	55	5	6.4	3.0	OR ASTORIA	48	4	5.7	-2.0
BARROW	-20	0	0.1	0.0	ME CARIBOU	12	-1	2.7	0.6	BURNS	37	4	1.0	0.0
FAIRBANKS	-9	-5	0.7	0.2	PORTLAND	26	2	3.4	-0.1	MEDFORD	49	6	0.6	-1.5
JUNEAU	33	5	7.3	3.6	MD BALTIMORE	37	2	2.5	-0.5	PENDLETON	43	3	1.0	-0.1
KODIAK	28	-3	2.1	-2.9	SALISBURY	39	2	4.1	0.8	PORTLAND	48	5	4.1	0.2
NOME	0	-3	0.5	0.0	MA BOSTON	32	2	2.3	-1.4	SALEM	48	5	4.5	-0.1
AZ FLAGSTAFF	35	4	3.7	1.6	CHATHAM	33	1	2.2	-2.0	PA ALLENTOWN	34	4	1.5	-1.5
PHOENIX	62	6	0.9	0.3	MI ALPENA	24	5	1.7	0.4	ERIE	31	5	1.9	-0.2
PRESCOTT	44	2	2.2	1.5	DETROIT	31	5	1.5	-0.2	HARRISBURG	36	4	1.6	-1.1
TUCSON	57	4	1.8	1.2	FLINT	29	6	1.6	0.2	PHILADELPHIA	37	4	1.3	-1.5
WINSLOW	40	2	0.2	-0.3	GRAND RAPIDS	30	6	1.1	-0.4	PITTSBURGH	34	5	1.7	-0.6
YUMA	64	4	0.8	0.5	HOUGHTON LAKE	25	7	1.4	0.1	SCRANTON	30	3	1.4	-0.6
AR FORT SMITH	50	8	1.5	-1.0	LANSING	29	7	1.4	0.2	WILLIAMSPORT	32	4	1.4	-1.5
LITTLE ROCK	50	6	2.3	-1.5	MARQUETTE	20	5	2.7	0.8	RI PROVIDENCE	33	3	2.1	-1.6
CA BAKERSFIELD	57	3	2.1	1.0	MUSKEGON	30	6	1.3	-0.3	SC CHARLESTON	55	5	2.2	-1.1
BISHOP	--	-	1.3	0.3	SAULT ST. MARIE	18	3	1.1	-0.6	COLUMBIA	51	4	4.2	0.2
EUREKA	54	5	3.8	-1.4	MN ALEXANDRIA	24	12	0.3	-0.4	FLORENCE	52	5	1.8	-1.5
FRESNO	56	5	4.7	2.9	DULUTH	21	9	0.6	-0.3	GREENVILLE	48	4	6.1	1.8
LOS ANGELES	61	4	4.7	2.2	INT'L FALLS	17	9	1.6	0.9	SD ABERDEEN	29	13	0.5	-0.2
REDDING	53	2	10.2	4.0	MINNEAPOLIS	28	11	0.6	-0.3	HURON	30	11	1.2	0.4
SACRAMENTO	54	4	5.5	2.6	ROCHESTER	27	10	0.6	-0.1	RAPID CITY	37	10	0.2	-0.4
SAN DIEGO	61	3	3.3	1.9	ST. CLOUD	25	11	0.3	-0.5	SIOUX FALLS	30	11	1.8	0.9
SAN FRANCISCO	56	4	6.4	3.1	MS GREENWOOD	52	5	4.1	-0.4	TN BRISTOL	43	5	3.5	0.1
STOCKTON	55	5	5.4	3.1	JACKSON	54	5	3.8	-0.4	CHATTANOOGA	47	5	4.6	-0.1
CO ALAMOSA	15	-8	0.1	-0.2	MERIDIAN	53	5	6.0	1.4	KNOXVILLE	46	4	3.4	-0.8
CO. SPRINGS	38	5	T	-0.3	TUPELO	48	3	3.2	-1.5	MEMPHIS	50	6	2.3	-2.0
DENVER	40	7	0.1	-0.6	MO CAPE GIRARDEAU	---	-	3.0	-0.1	NASHVILLE	46	5	2.6	-1.4
GRAND JUNCTION	38	4	0.3	-0.2	COLUMBIA	40	7	2.0	0.1	TX ABILENE	51	3	3.6	2.6
PUEBLO	39	4	0.2	0.0	KANSAS CITY	40	6	2.0	0.8	AMARILLO	45	5	0.3	-0.3
CT BRIDGEPORT	33	3	2.1	-0.8	SAINT LOUIS	43	9	1.9	-0.2	AUSTIN	59	6	6.6	4.1
HARTFORD	30	2	2.2	-1.0	SPRINGFIELD	44	8	2.2	0.1	BEAUMONT	58	3	6.5	2.2
DC WASHINGTON	41	3	2.2	-0.4	MT BILLINGS	40	11	0.1	-0.6	BROWNSVILLE	66	3	2.0	0.5
FL APALACHICOLA	58	4	8.9	5.2	GLASGOW	31	15	T	-0.2	CORPUS CHRISTI	63	4	4.5	3.0
DAYTONA BEACH	62	3	1.7	-1.4	GREAT FALLS	37	10	0.2	-0.5	DEL RIO	59	3	3.8	2.9
FT. MYERS	68	4	3.9	1.7	HAVRE	30	10	0.2	-0.2	EL PASO	51	2	0.2	-0.3
JACKSONVILLE	58	2	2.6	-1.0	HELENA	34	8	0.1	-0.3	FORT WORTH	54	6	2.4	0.6
KEY WEST	72	2	1.2	-0.7	KALISPELL	34	8	0.8	-0.3	GALVESTON	60	4	8.3	6.0
MIAMI	70	3	1.5	-0.5	MILES CITY	37	14	T	-0.6	HOUSTON	59	3	6.0	2.7
ORLANDO	65	4	2.4	-0.7	MISSOULA	37	8	0.2	-0.6	LAREDO	62	2	0.6	-0.5
TALLAHASSEE	56	2	6.4	1.4	NE GRAND ISLAND	38	11	1.4	0.6	LUBBOCK	49	6	2.0	1.5
TAMPA	63	2	3.7	0.7	LINCOLN	38	11	0.9	-0.1	MIDLAND	51	3	2.6	2.0
WEST PALM BEACH	69	3	3.3	0.7	NORFOLK	36	12	1.5	0.7	SAN ANGELO	53	3	3.8	3.0
GA ATHENS	50	5	4.8	0.6	NORTH PLATTE	37	10	1.4	0.9	SAN ANTONIO	59	5	6.4	4.5
ATLANTA	52	7	3.9	-0.5	OMAHA	36	9	1.2	0.3	VICTORIA	61	6	9.1	6.8
AUGUSTA	51	4	4.5	0.5	SCOTTSBLUFF	38	8	0.9	0.5	WACO	55	4	6.3	4.3
MACON	53	3	4.5	0.0	VALENTINE	35	11	0.2	-0.3	WICHITA FALLS	51	6	1.2	0.2
SAVANNAH	56	4	2.2	-0.9	NV ELKO	34	3	0.8	0.0	UT BLANDING	---	-	1.5	0.5
HI HILO	71	0	1.3	-12.2	ELY	35	6	0.7	0.0	CEDAR CITY	39	5	1.1	0.3
HONOLULU	73	1	1.3	-1.4	LAS VEGAS	54	4	1.3	0.9	SALT LAKE CITY	39	5	1.2	-0.1
KAHULUI	71	0	1.0	-2.3	RENO	42	4	0.4	-0.5	VT BURLINGTON	19	1	1.6	-0.2
LIHUE	70	-1	3.2	-0.5	WINNEMUCCA	41	5	0.2	-0.4	VA LYNCHBURG	41	4	2.9	0.0
ID BOISE	42	6	0.9	-0.1	NH CONCORD	26	4	1.3	-1.2	NORFOLK	45	4	2.1	-1.2
LEWISTON	42	4	0.7	-0.2	NJ ATLANTIC CITY	35	2	2.1	-1.2	RICHMOND	43	4	2.9	-0.2
POCATELLO	38	8	0.6	-0.2	NM ALBUQUERQUE	42	2	0.2	-0.2	ROANOKE	41	3	3.7	0.6
IL CAIRO	---	-	3.1	-0.3	CLOVIS	46	5	0.3	-0.1	WA COLVILLE	36	5	1.3	-0.2
CHICAGO	33	8	1.4	0.1	ROSWELL	47	3	0.7	0.4	QUILLAYUTE	47	5	7.2	-5.0
MOLINE	34	9	1.9	0.6	NY ALBANY	27	3	1.3	-0.9	SEATTLE-TACOMA	47	4	3.1	-1.1
PEORIA	36	9	1.6	0.1	BINGHAMTON	26	3	2.0	-0.3	SPOKANE	39	7	1.8	0.2
QUINCY	37	8	1.6	0.1	BUFFALO	28	3	2.4	0.1	WALLA WALLA	43	2	1.4	0.0
ROCKFORD	32	9	1.2	0.0	NEW YORK	36	3	1.4	-1.6	YAKIMA	40	4	0.6	-0.1
SPRINGFIELD	38	9	1.6	-0.1	ROCHESTER	27	3	1.9	-0.4	WV BECKLEY	39	7	2.4	-0.8
IN EVANSVILLE	42	7	1.5	-1.5	SYRACUSE	26	2	2.5	-0.2	CHARLESTON	42	6	2.7	-0.4
FORT WAYNE	34	7	1.4	-0.6	NC ASHEVILLE	44	5	3.7	0.4	ELKINS	35	5	3.7	0.9
INDIANAPOLIS	38	8	1.2	-1.3	CHARLOTTE	49	6	4.3	0.5	HUNTINGTON	41	5	2.3	-0.5
SOUTH BEND	33	6	1.7	-0.2	GREENSBORO	45	5	3.0	-0.3	PARKERSBURG	38	4	1.5	-1.0
IA DES MOINES	35	10	2.1	1.0	HATTERAS	49	4	4.2	0.2	WI GREEN BAY	27	9	0.6	-0.5
DUBUQUE	30	9	1.9	0.6	NEW BERN	49	3	1.7	-2.2	LACROSSE	30	10	0.8	0.0
SIOUX CITY	35	11	0.8	-0.2	RALEIGH	46	5	2.2	-1.2	MADISON	29	8	1.3	0.3
WATERLOO	31	11	1.5	0.5	WILMINGTON	52	4	3.4	0.0	MILWAUKEE	32	8	1.5	0.2
KS CONCORDIA	41	9	0.9	0.0	ND BISMARCK	27	12	0.4	0.0	WAUSAU	25	9	0.8	-0.2
DODGE CITY	42	7	0.4	-0.2	FARGO	24	12	0.5	0.1	WY CASPER	37	9	0.4	-0.2
GOODLAND	40	8	0.5	0.2	GRAND FORKS	21	12	0.4	-0.1	CHEYENNE	37	7	0.1	-0.3
TOPEKA	42	9	1.2	0.1	WILLISTON	20	13	0.1	-0.4	LANDER	33	7	0.2	-0.4
WICHITA	45	10	0.5	-0.4	OH AKRON-CANTON	32	5	2.0	-0.2	SHERIDAN	38	11	0.1	-0.7
KY BOWLING GREEN	44	6	2.9	-1.1	CINCINNATI	40	7	0.9	-1.8	PR SAN JUAN	78	2	1.2	-1.0
JACKSON	43	10	3.1	-0.6	CLEVELAND	33	5	2.6	0.5					
LEXINGTON	41	7	1.8	-1.5	COLUMBUS	37	7	0.8	-1.3					
LOUISVILLE	44	8	1.7	-1.5	DAYTON	36	6	1.0	-1.1					
PADUCAH	46	8	2.7	-0.7	MANSFIELD	32	5	2.1	0.2					

Based on 1951-80 normals.

HEATING DEGREE DAYS (Base 65° F)
February 1992

STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL	STATES AND STATIONS	TOTAL	DEP. FROM NORMAL
AL BIRMINGHAM	410	-138	NEW ORLEANS	203	-123	CINCINNATI	727	-223
MOBILE	202	-149	SHREVEPORT	297	-154	DAYTON	828	-194
MONTGOMERY	324	-128	ME CARIBOU	1564	61	TOLEDO	953	-180
AK ANCHORAGE	1444	80	PORTLAND	1127	-87	YOUNGSTOWN	960	-170
BARROW	2481	27	MD BALTIMORE	802	-73	OK OKLAHOMA CITY	430	-269
FAIRBANKS	2140	144	SALISBURY	740	-80	TULSA	423	-278
JUNEAU	930	-147	MA BOSTON	937	-54	OR ASTORIA	479	-133
KODIAK	1072	40	CHATHAM	937	-44	BURNS	802	-110
NOME	1887	98	MI ALPENA	1197	-163	MEDFORD	476	-178
AZ FLAGSTAFF	854	-139	DETROIT	985	-149	PENDLETON	649	-91
PHOENIX	89	-188	FLINT	1024	-182	PORTLAND	483	-147
PRESCOTT	618	-128	GRAND RAPIDS	1001	-193	SALEM	498	-147
TUCSON	215	-121	HOUGHTON LAKE	1178	-182	PA ALLENTOWN	895	-137
WINSLOW	723	-45	LANSING	1023	-183	ERIE	996	-161
YUMA	39	-142	MARQUETTE	1308	-159	HARRISBURG	842	-126
AR FORT SMITH	429	-223	MUSKEGON	1013	-170	PHILADELPHIA	789	-132
LITTLE ROCK	415	-187	SAULT ST MARIE	1367	-100	PITTSBURGH	880	-166
CA BAKERSFIELD	237	-108	MN ALEXANDRIA	1185	-341	SCRANTON	1001	-104
EUREKA	316	-156	DULUTH	1266	-266	RI PROVIDENCE	919	-114
FRESNO	267	-152	INT'L FALLS	1404	-261	SC CHARLESTON	293	-154
LOS ANGELES	130	-111	MINNEAPOLIS	1067	-306	COLUMBIA	402	-121
REDDING	337	-85	ROCHESTER	1104	-283	FLORENCE	365	-156
SACRAMENTO	311	-114	SAINT CLOUD	1167	-315	GREENVILLE	487	-130
SAN DIEGO	115	-88	MS GREENWOOD	380	-144	SD ABERDEEN	1041	-383
SAN FRANCISCO	252	-136	JACKSON	323	-153	HURON	1015	-340
STOCKTON	291	-134	MERIDIAN	327	-151	RAPID CITY	828	-300
CO DENVER	714	-195	MO CAPE GIRARDEAU	572	-250	SIOUX FALLS	1009	-317
GRAND JCT.	788	-121	COLUMBIA	717	-222	TN CHATTANOOGA	520	-144
PUEBLO	759	-102	KANSAS CITY	724	-226	KNOXVILLE	546	-132
CT BRIDGEPORT	895	-99	SAINT LOUIS	642	-259	MEMPHIS	433	-187
HARTFORD	1002	-79	SPRINGFIELD	607	-224	NASHVILLE	544	-166
DE WILMINGTON	799	-119	MT BILLINGS	737	-322	TX ABILENE	408	-85
DC WASHINGTON	686	-108	GLASGOW	995	-425	AMARILLO	576	-158
FL APALACHICOLA	206	-113	GREAT FALLS	819	-289	AUSTIN	188	-169
DAYTONA BEACH	139	-91	HAVRE	1004	-308	BEAUMONT	198	-116
FORT MYERS	26	-97	HELENA	884	-244	BROWNSVILLE	63	-75
JACKSONVILLE	207	-103	KALISPELL	886	-234	CORPUS CHRISTI	102	-112
KEY WEST	2	-36	MILES CITY	813	-427	DEL RIO	193	-96
MIAMI	7	-56	MISSOULA	823	-244	EL PASO	423	-56
ORLANDO	79	-97	NE GRAND ISLAND	778	-314	FORT WORTH	302	-156
TALLAHASSEE	262	-89	LINCOLN	784	-328	GALVESTON	150	-140
TAMPA	90	-101	NORFOLK	842	-349	HOUSTON	197	-126
W. PALM BEACH	21	-67	NORTH PLATTE	797	-294	LUBBOCK	465	-181
GA ATLANTA	377	-203	OMAHA	830	-261	MIDLAND-ODESSA	404	-94
AUGUSTA	398	-111	SCOTTSBLUFF	783	-226	SAN ANGELO	344	-96
MACON	354	-111	VALENTINE	852	-328	SAN ANTONIO	188	-139
SAVANNAH	274	-124	NV ELY	861	-187	VICTORIA	133	-142
ID BOISE	657	-178	LAS VEGAS	308	-121	WACO	283	-144
LEWISTON	656	-110	RENO	666	-133	WICHITA FALLS	391	-177
POCATELLO	776	-251	WINNEMUCCA	717	-131	UT BLANDING	747	-178
IL CHICAGO	913	-214	NH CONCORD	1123	-114	CEDAR CITY	748	-143
MOLINE	884	-268	NJ ATLANTIC CITY	839	-80	SALT LAKE CITY	741	-152
PEORIA	847	-257	NM ALBUQUERQUE	651	-89	VT BURLINGTON	1327	-29
QUINCY	806	-234	CLOVIS	545	-157	VA LYNCHBURG	678	-119
ROCKFORD	945	-257	ROSWELL	509	-42	NORFOLK	575	-115
SPRINGFIELD	771	-254	NY ALBANY	1098	-105	RICHMOND	640	-114
IN EVANSVILLE	673	-196	BINGHAMTON	1116	-116	ROANOKE	677	-106
FORT WAYNE	891	-224	BUFFALO	1076	-95	WA COLVILLE	844	-139
INDIANAPOLIS	766	-248	NEW YORK	819	-98	QUILLAYUTE	531	-144
SOUTH BEND	915	-201	ROCHESTER	1088	-86	SEATTLE-TACOMA	507	-136
IA DES MOINES	868	-302	SYRACUSE	1112	-74	SPOKANE	750	-193
DUBUQUE	994	-269	NC ASHEVILLE	596	-152	YAKIMA	710	-125
SIOUX CITY	872	-335	CAPE HATTERAS	449	-111	WV BECKLEY	732	-213
WATERLOO	977	-320	CHARLOTTE	465	-173	CHARLESTON	670	-179
KS CONCORDIA	688	-297	GREENSBORO	567	-154	HUNTINGTON	678	-165
DODGE CITY	654	-213	NEW BERN	450	-121	PARKERSBURG	780	-118
GOODLAND	716	-242	RALEIGH-DURHAM	537	-138	WI GREEN BAY	1093	-272
TOPEKA	673	-265	WILMINGTON	383	-130	LA CROSSE	1001	-308
WICHITA	574	-269	ND BISMARCK	1093	-366	MADISON	1031	-255
KY BOWLING GREEN	612	-185	FARGO	1198	-363	MILWAUKEE	955	-259
LEXINGTON	682	-196	GRAND FORKS	1266	-344	WAUSAU	1166	-254
LOUISVILLE	610	-230	WILLISTON	1058	-399	WY CASPER	825	-278
LA ALEXANDRIA	265	-139	OH AKRON-CANTON	939	-153	CHEYENNE	813	-222
BATON ROUGE	207	-144	CLEVELAND	929	-158	LANDER	919	-217
LAKE CHARLES	195	-138	COLUMBUS	814	-203	SHERIDAN	785	-340

Based on 1951-80 normals.

February Weather in Historical Perspective

The nationally averaged temperature was more than 4.5° F above normal in February (fig. 1), placing last month as the third warmest February since 1895. Only in 1954 and 1930 was a February warmer, while 1991 and 1976 slipped to fourth and fifth in the February rankings. February precipitation was less trendy, varying greatly from region to region. The weighted precipitation index, which takes local climatology into account so that typically wet areas do not dominate the index, ranked February 1992 as the 39th driest on record (fig. 2).

Temperatures were above normal in all nine climatic divisions (table 1). Six regions placed in the warmest tenth of their historical February rankings. The Northwest and West North Central regions both notched their third warmest February. Dryness accompanied the warmth, as the West North Central region recorded its 6th driest February, and the Northwest region noted its 23rd driest. In contrast, abnormally heavy precipitation deluged the South region (7th wettest). Precipitation was also above normal in the West region (16th wettest), benefiting California's Sierra Nevada snowpack.

California statewide precipitation since September 1, 1991, is about 90 percent of normal (fig. 3), which is the highest September to February accumulation since 1985-86. Many locations in southern California have reported rainy season moisture surpluses for the first time since the 6-year drought began in 1986-87. However, precipitation over the major watershed areas of northern California has been only about 75 percent of normal. Two weeks of storminess in California made February 1992 the wettest month there since March 1991 (fig. 4). With a statewide average of more than 6 inches of rain, February was the third wettest month since the beginning of 1984. Farther east, the central Plains (primary Hard Red Winter Wheat Belt) received above-normal October to February precipitation for the first time in 5 years (fig. 5).

Figure 1

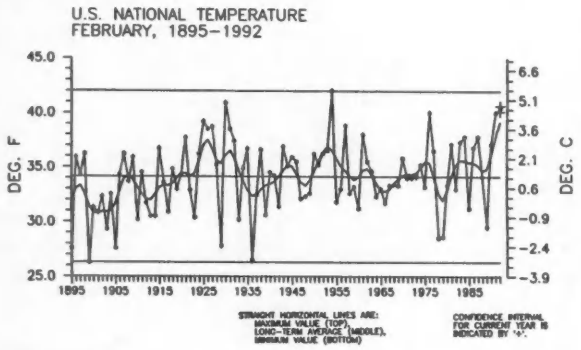

U.S. NATIONAL TEMPERATURE
FEBRUARY, 1895–1992
DEG. F
DEG. C
STRAIGHT HORIZONTAL LINES ARE: MAXIMUM VALUE (TOP), LONG-TERM AVERAGE (MIDDLE), MINIMUM VALUE (BOTTOM)
CONFIDENCE INTERVAL FOR CURRENT YEAR IS INDICATED BY '+'

Figure 2

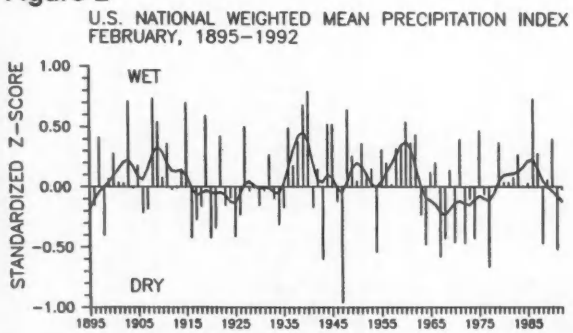


TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR FEB 1992, BASED ON THE PERIOD 1895-1992. 1 = DRIEST/COLDEST, 98 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
NORTHEAST	28	68
EAST NORTH CENTRAL	60	93
CENTRAL	29	91
SOUTHEAST	60	77
WEST NORTH CENTRAL	6	96
SOUTH	92	90
SOUTHWEST	64	87
NORTHWEST	23	96
WEST	83	91
NATIONAL	39	96

Figure 3

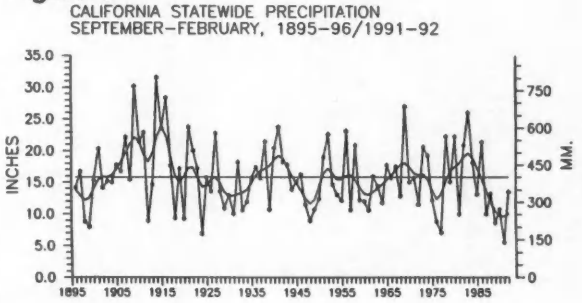


Figure 4

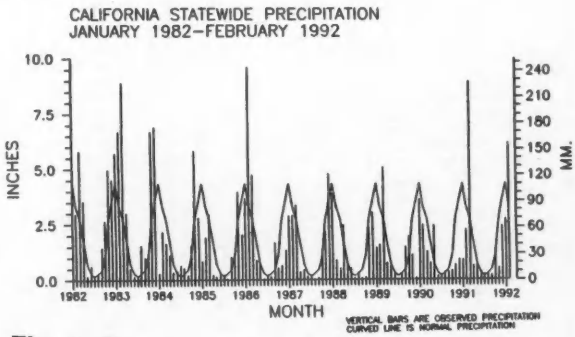
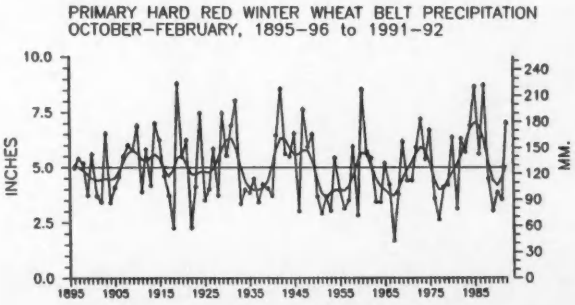
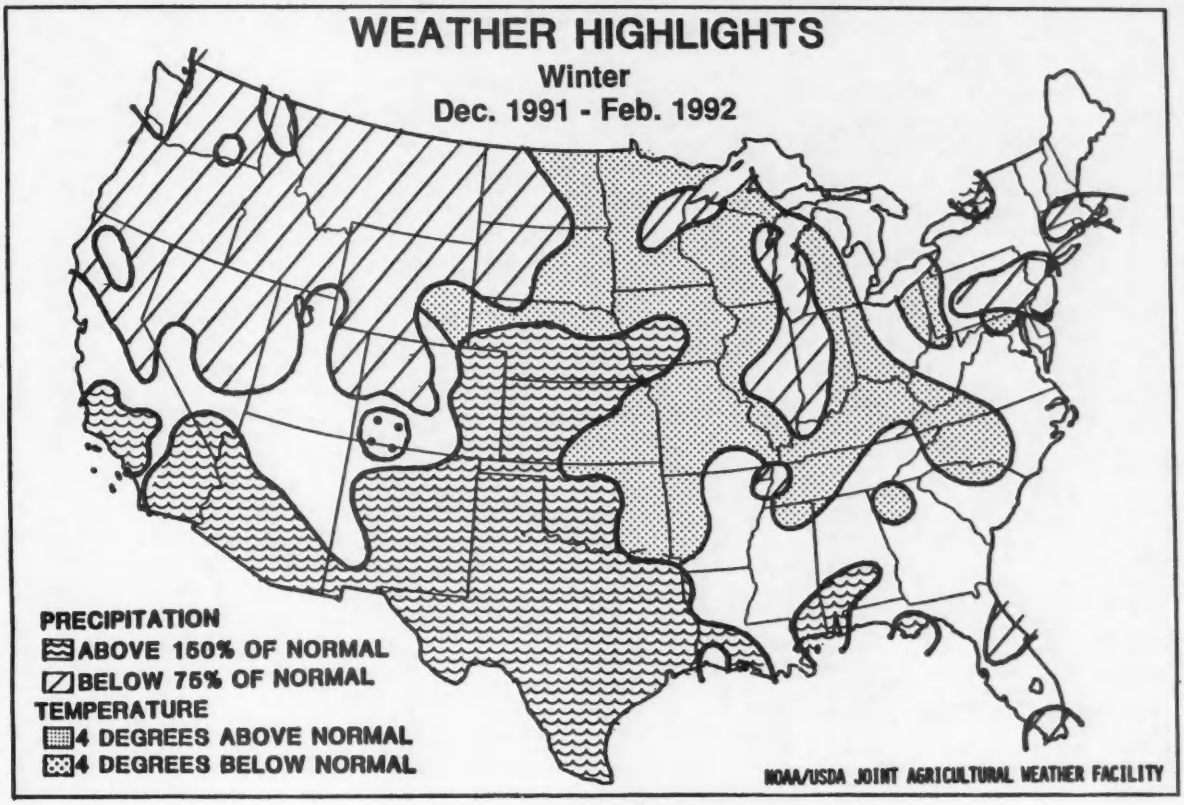


Figure 5





Winter Weather Review

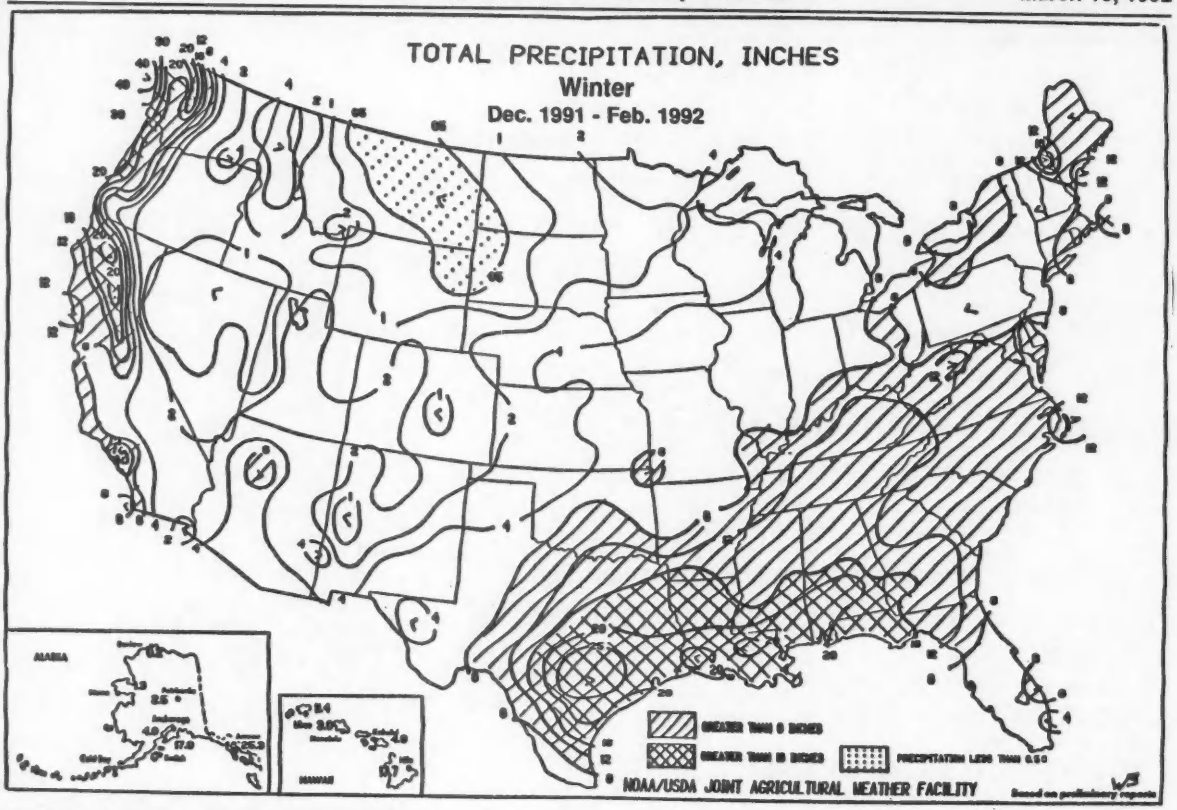
HIGHLIGHTS: Strong February storms took the edge off of California's 6-year drought, and relentless December rainfall caused major flooding in eastern Texas. The 13-week meteorological winter ended with a 12-week wet spell in progress along the western Gulf coast, and 8 consecutive wet weeks along the central Gulf coast. California's rainy season started more than 2 months late (December 27), and sputtered (after January 7), before resuming with ferocity after February 5. The Northwestern States were abnormally dry, as evidenced by eastern Montana's cumulative winter precipitation of less than one-half inch.

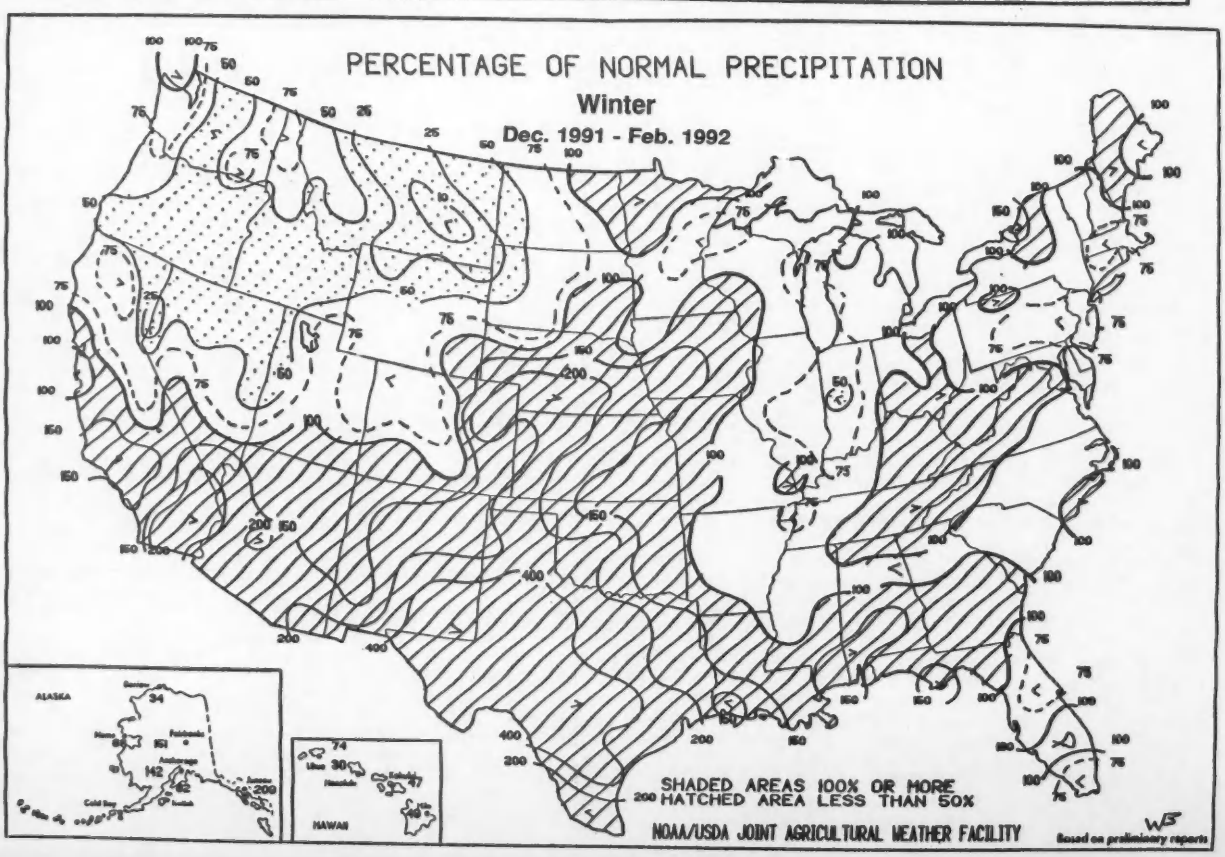
Temperatures were consistently above normal in the northern and central Plains after December 4, resulting in exceptional 3-month departures of up to +14° F in eastern Montana. Farther south, temperatures were above normal along the Gulf coast despite excessive wetness, primarily due to warmer-than-normal nighttime conditions. The only below normal winter temperatures in the contiguous States were recorded in northern Maine and in valleys nestled among the central and southern Rockies.

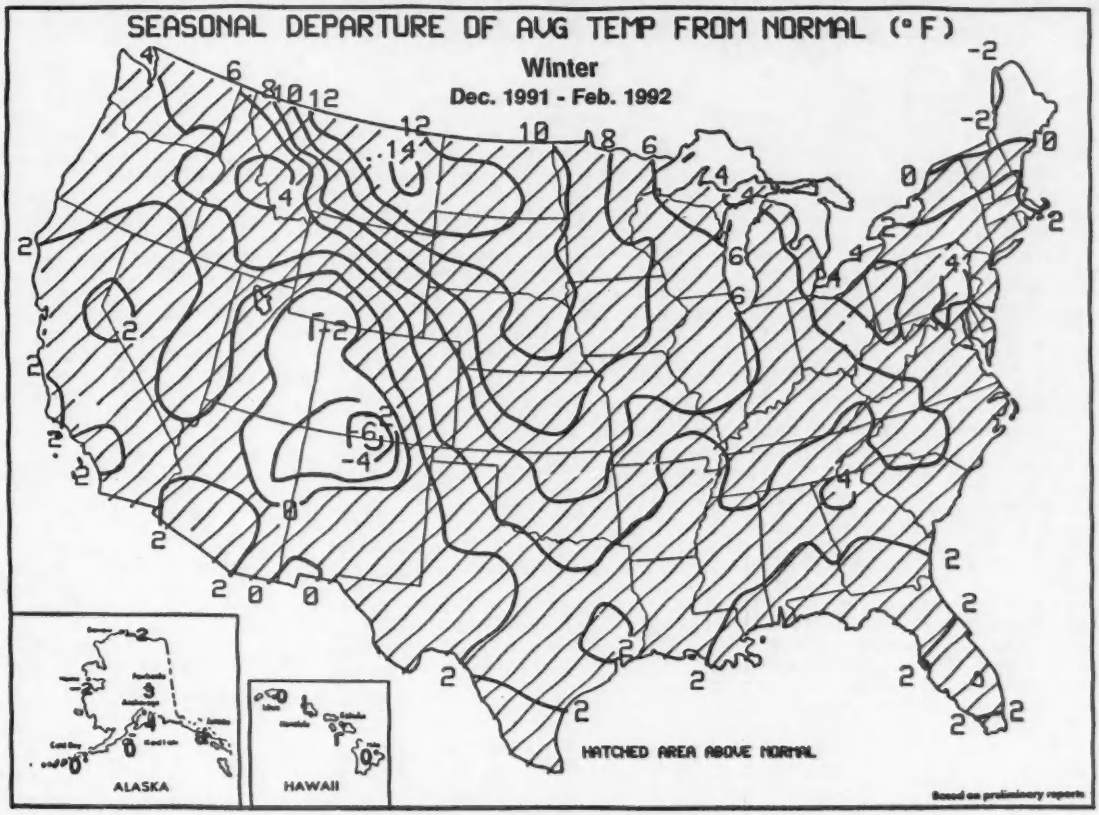
DECEMBER: Two storms early in the month produced heavy rain from eastern Texas to the mid-Atlantic region. But those storms paled next to Texas' epic 6-day storm that flooded most rivers in the eastern third of the State. In marked contrast, the northwestern corner of the Nation was extremely dry. Warmth accompanied the dryness, with monthly average temperatures ranging up to 9° F above normal in the northern Plains.

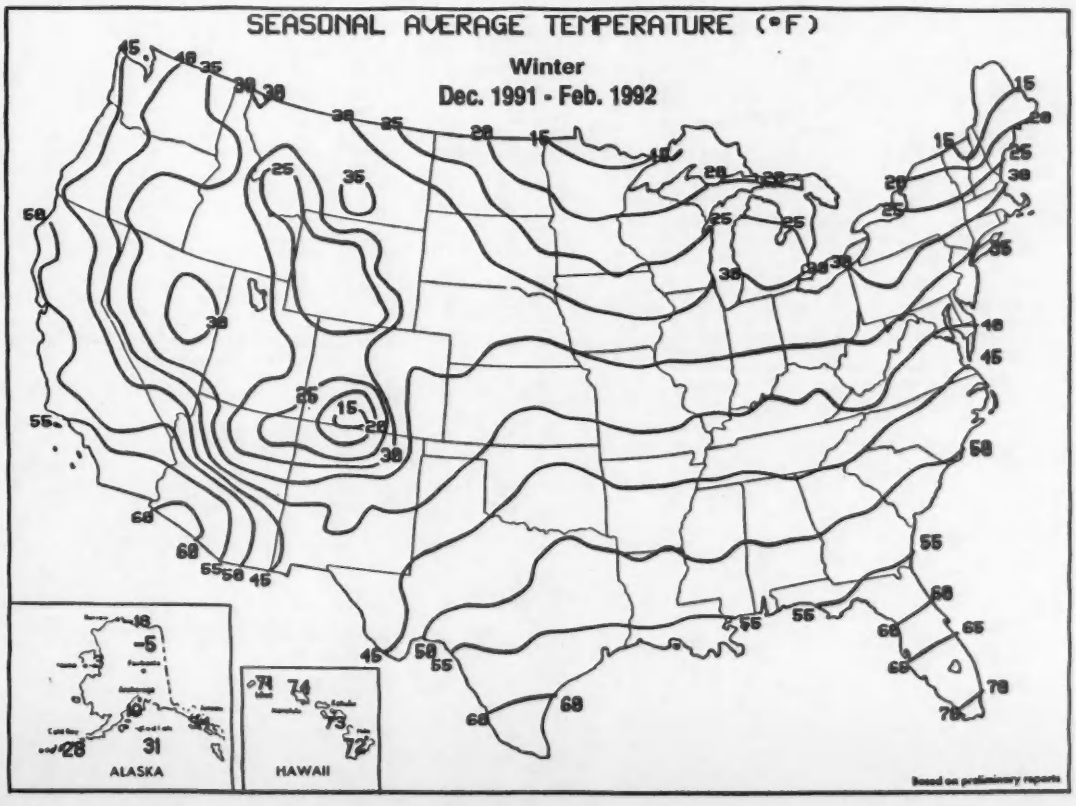
JANUARY: Rain continued to fall heavily at regular intervals in eastern Texas while also spreading eastward to soak the central Gulf coast. In California, 2 weeks of encouraging storminess faded as a high pressure system moved in. Subsequent storms were shunted into the coastal Pacific Northwest. The same ridge of high pressure kept the northern Plains in balmy downslope winds, allowing monthly temperature departures to reach nearly +20° F in northern Montana.

FEBRUARY: Wet spells continued in Texas and along the Gulf coast, and warm, dry weather persisted in the northern Plains. Several locations in Texas set winter rainfall records, including Austin and San Angelo. The Nation's most anomalous warm spot was once again the northern Plains, with departures reaching +15° F in eastern Montana. Very mild air overspread the northern half of the Nation to start and end the month, setting more than 160 daily record highs. With such warmth consistently in place, as it was throughout the winter, snowstorms were common only in the West's mountains, the Great Lakes States, and New England. But one major change transpired during February: California logged its second wettest month (behind March 1991) since February 1986. Between the 5th and the 21st, an average of more than 6 inches of precipitation drenched the State.


TOTAL PRECIPITATION, INCHES
Winter
Dec. 1991 - Feb. 1992
ALASKA
HAWAII
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY


PERCENTAGE OF NORMAL PRECIPITATION
Winter
Dec. 1991 - Feb. 1992
ALASKA
HAWAII
SHADED AREAS 100% OR MORE
200 HATCHED AREA LESS THAN 50%
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY


SEASONAL DEPARTURE OF AVG TEMP FROM NORMAL (°F)
Winter
Dec. 1991 - Feb. 1992
HATCHED AREA ABOVE NORMAL
ALASKA
HAWAII
Based on preliminary reports


SEASONAL AVERAGE TEMPERATURE (°F)
Winter
Dec. 1991 - Feb. 1992
ALASKA
HAWAII
Based on preliminary reports

Winter Weather in Historical Perspective

The winter of December 1991 - February 1992 was the warmest on record in the contiguous United States, smashing the previous mark set in 1953-54 (fig. 1). The national average temperature was more than 4° F above normal, a figure fueled by incredible warmth in the northern and central Plains. All nine climatic regions had above-normal temperatures (table 1). The Northwest, West North Central, East North Central, and Central regions had winter temperatures within the warmest 10 percent of the historical rankings. Five States (IA, KS, MT, NE, and OK) had their warmest winter on record (table 2), and four more ranked second (ID, IL, MO, and OR). Only Maine and New Mexico reported cooler-than-normal weather during the winter.

Precipitation tended to be below normal across the northern tier States, and above normal in the South. For the Nation as a whole, the weighted mean precipitation was slightly above normal, making the winter of 1991-92 the 44th wettest (54th driest) on record (fig. 2). It was also the wettest winter since 1982-83. Individual regions showed a sharp contrast in precipitation, ranging from a second wettest ranking in the South to fourth and seventh driest rankings in the West North Central and Northwest regions, respectively (table 1). Two States (NM and TX) had their wettest winter on record, while four States (ID, MT, OR, and WY) had one of their five driest winters (table 3).

Dry winters have been common in recent years in the Northwest and West North Central regions (figs. 3 and 4). The Northwest last received significantly above-normal winter precipitation 9 years ago in 1982-83. Unlike the Northwest, which typically averages more than 10 inches of precipitation during the 3 winter months, the West North Central region is normally quite dry during the winter, averaging less than 2 inches of moisture. Nevertheless, winter precipitation has now been below normal for 6 consecutive years. In sharp contrast, Texas rainfall has been over-abundant during the winter (fig. 5). The statewide average of nearly 14 inches is almost three times the normal, and more than 3 inches higher than the former winter record set in 1931-32.

Winter temperatures have shown a marked warming trend in the Central region since the late 1970's. After a record-cold winter in 1977-78, temperatures have rebounded to be above normal during five of the past six winters (fig. 6). The winter of 1991-92 was the third warmest on record. Farther north and west, there has also been a trend toward warmer winters in recent years, although year-to-year temperatures have fluctuated greatly. The Northwest region had its warmest winter since 1933-34 (fig. 7), and second warmest on record. The northern Great Plains toppled their warmest-winter mark set just 5 years ago in 1986-87 (fig. 8).

Figure 1

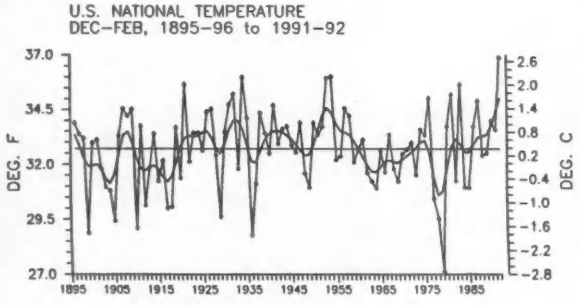


TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR DEC 1991-FEB 1992, BASED ON THE PERIOD 1895-96 TO 1991-92. 1 = DRIEST/COLDEST, 97 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
NATIONAL	54	97
NORTHEAST	29	78
EAST NORTH CENTRAL	45	94
CENTRAL	35	95
SOUTHEAST	59	78
WEST NORTH CENTRAL	4	97
SOUTH	96	88
SOUTHWEST	76	61
NORTHWEST	7	96
WEST	53	80

TABLE 2. TEMPERATURE RANKINGS FOR DEC 1991-FEB 1992, BASED ON THE PERIOD 1895-96 TO 1991-92. 1 = COLDEST, 97 = WARMEST.

STATE	RANK	STATE	RANK	STATE	RANK	STATE	RANK
AL	68	IA	97	NE	97	RI	87
AZ	77	KS	97	NV	79	SC	83
AR	85	KY	94	NH	85	SD	95
CA	77	LA	76	NJ	82	TN	85
CO	68	ME	43	NM	39	TX	78
CT	82	MD	79	NY	73	UT	57
DE	73	MA	75	NC	86	VT	72
FL	65	MI	88	ND	95	VA	90
GA	77	MN	95	OH	89	WA	95
ID	96	MS	81	OK	97	WV	83
IL	96	MO	96	OR	96	WI	93
IN	92	MT	97	PA	84	WY	89

Figure 2

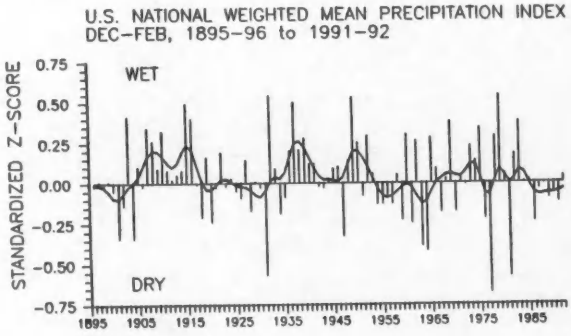


TABLE 3. PRECIPITATION RANKINGS FOR DEC 1991-FEB 1992, BASED ON THE PERIOD 1895-96 TO 1991-92. 1 = DRIEST, 97 = WETTEST.

STATE	RANK	STATE	RANK	STATE	RANK	STATE	RANK
AL	85	IA	65	NE	87	RI	42
AZ	80	KS	78	NV	11	SC	33
AR	15	KY	50	NH	20	SD	30
CA	56	LA	87	NJ	25	TN	57
CO	23	ME	38	NM	97	TX	97
CT	22	MD	31	NY	45	UT	20
DE	34	MA	15	NC	49	VT	19
FL	49	MI	29	ND	12	VA	51
GA	48	MN	67	OH	26	WA	25
ID	4	MS	61	OK	86	WV	53
IL	21	MO	37	OR	5	WI	35
IN	13	MT	3	PA	29	WY	3

Figure 3

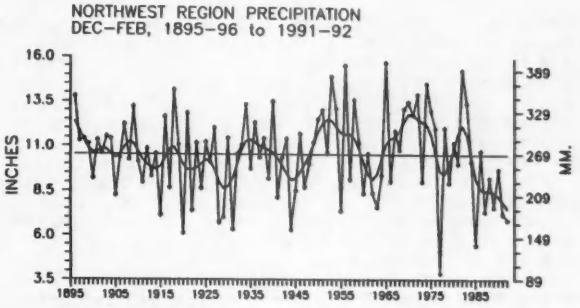


Figure 4

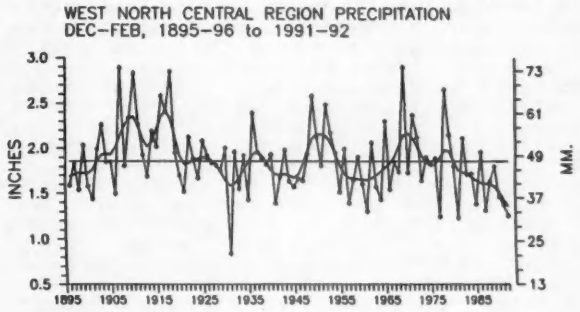


Figure 5

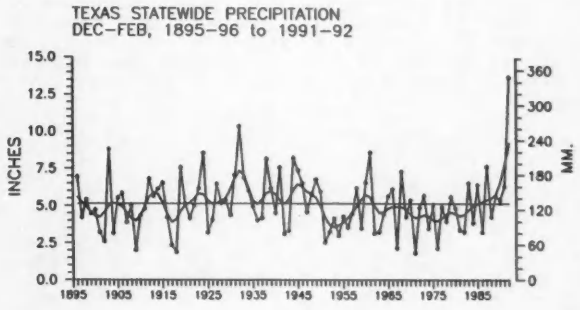


Figure 6

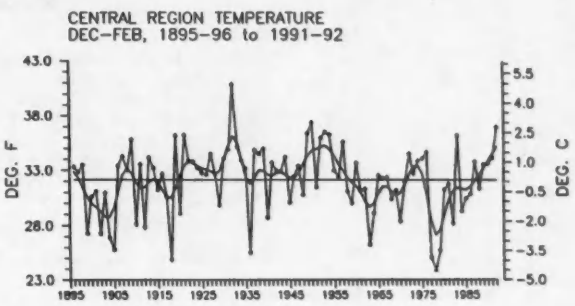


Figure 7

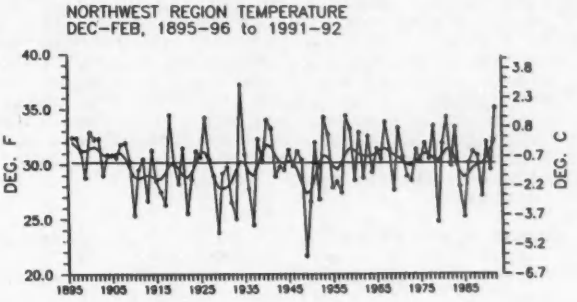
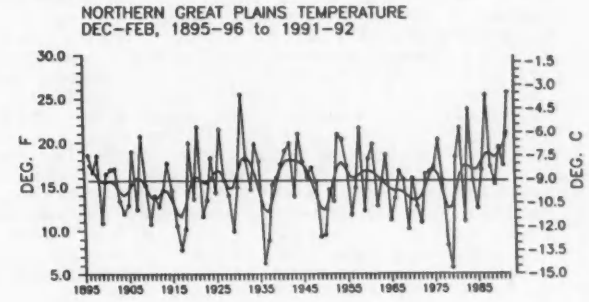


Figure 8



National Climatic Data Center, NOAA

National Agricultural Summary

March 2 - 8, 1992

HIGHLIGHTS: Greening of fall-seeded crops became more widespread as temperatures continued to average above normal across the Nation. The greatest departures in average temperatures were recorded in the East Central United States. Precipitation was recorded nationwide, with California benefiting from additional snowpack and reservoir filling. East Texas, however, experienced additional flooding and incessant rains during late winter that have completely saturated soils. Activities were halted throughout the Gulf region due to heavy rains.

SMALL GRAINS: Continued unseasonably warm weather led to further greening of fall-seeded grains. Winter wheat fields were beginning to green from the Pacific Northwest through the Ohio Valley; ahead of normal for most regions. Small grains were beginning to joint in the southernmost States, and nitrogen topdressing was nearing completion in the Southeast. Spring wheat seeding was underway in Oregon and Washington. Some Kansas producers were moving livestock off wheat, while others intensified grazing to check growth. Seeding of oats, and in some areas barley, became more common in the middle Mississippi Valley and Pacific Northwest.

OTHER FIELD CROPS: Corn was getting underway earlier than usual in Tennessee and South Carolina, and seeding continued as weather permitted in southeast Georgia, Florida, Louisiana, and the Rio Grande Valley of Texas. Cotton field preparation was delayed by rains in Arizona, while preplanting herbicides were being applied in California. Cotton planting gained momentum in the Rio Grande Valley, and some fields were planted in south Texas. Most fields in Texas' Coastal Bend, however, remained too wet for work. Light alfalfa harvest was underway in Arizona, and southern California producers continued greenchopping. Grain sorghum planting was in full swing in most parts of the Rio Grande Valley, and some limited planting occurred in south Texas. Sugarcane harvest was winding down in Florida, and harvest resumed in Texas after delays of several weeks. Irish potato planting continued in North Carolina, and some planting was undertaken in Virginia. Tobacco bed seeding was beginning in Kentucky, while transplanting was underway in Florida.

FRUIT AND NUTS: Budding of fruit trees became more prevalent in central and southern latitudes, and blooming of early fruits was reported in the Southeast. Arizona citrus and pecan harvests continued, as did California lemon and navel orange picking. Florida citrus groves remained in excellent condition with bloom in all stages. Florida Valencia orange harvest was increasing, grapefruit harvest remained active, and tangerine harvest was slowing. In Georgia, peaches were fair, with some orchards in full bloom. Grape and apple pruning, and cherry tree planting were active in Michigan. Maple syrup season got underway in New York, as warm weather was conducive to sap flows, syrup continued to be drawn further south.

VEGETABLES: Lettuce harvest continued in central and western Arizona. Artichoke harvest gained in volume in California's Imperial Valley, and asparagus packing started in the Westside area and continued in the Sacramento Delta. Harvests of broccoli, cauliflower, lettuce, and cabbage were nearing completion in the Imperial Valley, but supplies were steady in the central part of the State. Vegetable planting continued in northern Florida, while slowing in southern and central areas. Florida harvests of tomatoes, cabbage, peppers, potatoes, celery, strawberries, carrots, and squash remained active. Peas were being planted in Maryland and Delaware, and cabbage planting was in full swing in North Carolina. New Mexico lettuce and onions were both in good condition with onion transplanting still active. Rio Grande Valley onion fields looked good. However, excessive rains caused some disease. Light harvests of carrots, cabbage, broccoli, and cauliflower continued in Texas.

PASTURES AND LIVESTOCK: Mild weather continued to benefit calving and lambing, which were common in all areas. Sheep shearing gained momentum in the Rocky Mountains. Feed supplies remained adequate in most areas, with the continued mild weather easing demands. Winter wheat was providing excellent forage in the Southwest.

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Rainfall mostly under 0.50 in.; over 1.00 in. common southeast. Temperatures 8 to 15° above normal.

Wet conditions continued to limit field activities. Some land preparation underway in well drained fields. Soil moisture mostly adequate to surplus. Above normal temperatures boosted growth of permanent pastures, winter annuals. Budding of fruit trees became more prevalent. Winter wheat mostly good. Hay supplies adequate most areas; becoming short in isolated locations. Activities: General care, feeding of livestock, poultry, catfish; equipment repair, maintenance; soil testing; disking, fertilizing fields, where possible.

ARIZONA: Cloudy statewide, showers central, north, 1st. Heavy rain, thunderstorms statewide, 2nd to 4th. Clear, sunny skies, 5th, 6th. Thunderstorms returned statewide, 7th. Rainfall 0.08 in. northeast to 2.19 in. north central. Temperatures normal to 7° below. Extremes 23°; 73° higher elevations, 36°; 82° deserts.

Cotton field preparation delayed, rain. Alfalfa good; weed,insects light to moderate, harvest light. Small grains jointing, 60%, 52% 1991, 63% avg.; heading, 7%, 6% 1991, 8% avg. Lemons, grapefruit, oranges, tangerines, mixed vegetables, lettuce harvested central, west. Pecans harvested, central.

ARKANSAS: Temperatures well above normal, scattered showers, thunderstorms midweek, heaviest in south. Extremes 32°; 86°. Rainfall 0.12 to 2.73 in.

Wheat good to excellent. Few thin stands in Northwest. All Nitrogen applied. Seedbed preparation for row crops 50% complete in east central, little done in southeast due to wet conditions. Pastures in good, some weed problems. Livestock good. Some short feed supplies in northwest, due to last season's drought. Fruit in full bloom statewide.

CALIFORNIA: A deep low pressure trough along the coast allowed several weather systems to track through the State. The first two split, taking the brunt of their energy to the south. The last caught the State broadside. Snow levels lowered to about 4500 ft. in the northern Sierra Nevada.

Field activities progressed most areas. Late week rains slowed activities. Small grains, new alfalfa, sugarbeets excellent growth. Seeding small grains, forages, isolated areas. Wheat sprayed broadleaf weed control. Alfalfa treated weeds, weevils. Green chopping alfalfa, forages, southern counties. Cotton fields received preplant herbicides. Ground preparation other spring planted crops. Almonds pollinated. Stonefruit in full bloom. Blossom rot, thrips, weed control active. Tree, vine pruning active. Vineyards leafing out. Lemon picking active south coast area. Navel orange harvest continued more than 40% crop picked to date. Sizes small, quality good. Valencia oranges maturing well. Good growth recently. Artichoke harvest picked up volume Imperial Valley. Asparagus packing started Westside area, continued active Delta. Broccoli fairly heavy Salinas Watsonville, moderate Santa Maria, good quality. Harvest continued Westside, Patterson Newman districts. Cauliflower moderate both Salinas Watsonville, Santa Maria variable quality. Harvesting broccoli, cauliflower, lettuce, cabbage Imperial Valley nearing completion. Fall potato movement Tulelake Butte Valley moderate. Central valley, fresh market tomato transplanting continued; bean, onion, garlic plantings growing well. Range, pasture good to excellent. Increased grass growth. Stock ponds filling well. Sheep continued grazing alfalfa. Supplemental feeding, movement light. Livestock good. Calving, lambing activity increased. Few reports of sickness. Bees into plum, almond orchards.

COLORADO: A strong, slow moving storm moved into the State 3rd to 5th, left significant moisture in all areas. Moisture in the west was mostly 0.25 to 0.50 in., while in east most river basins received 0.33 to 0.66 in. Amounts greater than 1.00 in. near the eastern foothills with nearly 2.50 in. at Seaman reservoir northwest of Fort Collins. Snowfall 1 to 2 feet in mountains. On 8th blizzard began to affect eastern areas with 8 to 24 in. of new snow expected in northeast, 1 foot or more in the mountains. Temperatures 9 to 13° above normal in most locations except in the San Luis Valley where they were generally 3 to 6° above normal.

Significant snowfall in western plains at the end of period stopped fieldwork. Midweek rain curtailed most field activities, caused some discomfort for young calves, lambs. Ranchers preparing for storm which was expected to arrive over the weekend. The statewide moisture will be beneficial to winter wheat crop.

FLORIDA: Unusually warm week. Temperatures 8 to 10° above normal north Florida, 4 to 8° above normal Peninsula. Highs; 80s common, upper 80s to 90° inland Peninsula. Lows; mostly 40s north, upper 40s to mid 50s central, interior south, 60s lower southeast coast. Rain; 0.50 to 1.50 in. northern areas, 2.00 to 4.00 in. eastern Panhandle, only a few Peninsula locations received more than 1.00 in.

Soil moisture adequate to surplus Panhandle, northern Peninsula; short to adequate central, southern Peninsula. Field preparations for spring planted crops active. Corn planting active. Sugarcane harvest winding down. Tobacco transplanting underway. Citrus groves, trees excellent condition. Moisture a little short, irrigation continues where needed. Abundant new growth, bloom buds. Bloom all stages all areas. Valencia harvest increasing. Grapefruit movement active lower east coast. Temple, Honey tangerine harvest slowing. Caretakers cutting cover crops, hedging harvested groves, unbanking young trees. Above normal temperatures, limited rainfall prevailed over major vegetable producing areas. Planting active northern areas, slowing southern, central areas. Harvest active. Volume leaders: tomatoes, cabbage, peppers, potatoes, celery, strawberries, carrots, squash. Also available: snap beans, sweet corn, cucumbers, eggplant, escarole, lettuce, radishes. State's pastures

poor to good. Pasture ratings 10% poor, 30% fair, 60% good. Soil moisture levels adequate to surplus. State's cattle herds fair to excellent.

GEORGIA: Warm week. Temperatures 11 to 14° above normal. Extreme highs upper 70s north, middle 80s central, south. Lows around 30° mountains, mostly middle, upper 40s elsewhere. Few central locations lows upper 30s. Rain 1 to 3 days. Northwest totals under 0.50 in., numerous northeast locations 1.00 to 2.00 in., 1.00 to 2.00 in. typical southwest, under 0.75 in. southeast.

Soil moisture adequate east, surplus elsewhere. Most of week warm, dry, fields dry enough to work late in week, more rain fell over weekend. Corn planting continued Southwest, earliest planted, good stands, condition. Tobacco plants fair to mostly good. Wheat, other small grains fair to mostly good, final nitrogen fertilizer applications nearing completion. Onions improved, fair to mostly good. Peaches fair, some orchards in full bloom. Land preparation for spring planting active late in week. Pastures variable, poor to good. Cattle, hogs good.

HAWAII: Mostly dry, sunny weather, some passing showers. Some crops continued to suffer from dry weather. Irrigation active, possible water restriction may result on Hawaii island. Disease, insect controls active with warmer weather. Temperatures high 50s to mid 80s. Winds varied at 5 to 20 mph. Rainfall none to 1.70 in.

Days suitable for fieldwork 7.0. Papaya production declined slightly. Sugar yields benefiting from extended dry, sunny period. Burning ban on Hawaii island making sugar recovery difficult by not allowing field burning to remove cane trash. Irrigation water available driest areas.

IDAHO: Scattered precipitation fell across State. Temperatures 6 to 15° above normal.

Soil moisture varied from short to adequate. Spring fieldwork has started with farmers fertilizing, preparing to seed spring grains. Hay, roughage supplies adequate to surplus. Sheep shearing has been reported underway with livestock reported in good to excellent.

ILLINOIS: Spring-like weather occurred throughout the week; a few severe thunderstorms reported on 7th. Temperatures 15 to 24° above normal, reaching as high as the low 70s. Precipitation near 0.15 in to 0.90 in., which was 0.30 to 1.00 in. dryer than normal for central, southern areas, 0.30 to 0.50 in. above normal for the northern part of the State. Four inch soil temperatures mid 40s to nearly 60°.

INDIANA: Temperatures 15 to 25° above normal. Highs low 60s to low 70s. Lows, low 40s to low 50s. Precipitation 0.25 to 1.00 in. Warm weather, sunshine spurred early plant development.

Excellent week for fieldwork. Main activities: Plowing, disking, spreading fertilizer, applying nitrogen, seeding oats. Other activities: topdressing wheat, seeding mint, program sign up, machinery and fence repair, building maintenance, purchasing supplies, tax preparation, care of livestock. Winter wheat poor to good. Hay supplies tight. Livestock mostly good.

IOWA: Temperatures 19 to 25° above normal. Extremes 77°, Lamoni (2nd); 23° Estherville (9th). Thirteenth consecutive week of above normal temperatures. Precipitation 0.18 in. (east central) to 2.68 in. (north central). State average 1.14 in. (weekly normal 0.39 in).

KANSAS: Temperatures 17 to 20° above normal except central, northeast 22 to 23° above normal. Rainfall recorded most areas. Totals 0.06 to 0.20 in. south; 0.65 to 1.40 in. elsewhere.

Days suitable for fieldwork 4.0. Topsoil 23% short, 60% adequate, 17% surplus. Subsoil moisture 41% short, 55% adequate, 4% surplus. Wheat breaking dormancy; some stands jointing southern areas; most fields ahead of schedule. Good top growth, root development most areas. Insect, diseases very light. Some producers moving livestock off wheat; others grazing wheat heavier to slow growth. Farmers fertilizing, spring seedbed preparation, planting oats, barley. Near ideal weather allowing calving, lambing to move at rapid pace. Native pastures very short but some greening up.

KENTUCKY: Record warmth. Both high and low temperatures 15 to 25° above normal. Highs averaged 70°; lows 50°. Precipitation a few hundredths of an inch in west to around 0.50 in. central, 1.00 in. in east.

Soil moisture mostly adequate. Field activity increased. Spreading fertilizer, preparing tobacco beds, some tobacco bed seeding, plowing for corn. Abnormal warmth stimulated early crop growth. Burley markets closing, sales equal to production estimates.

LOUISIANA: Temperatures 7° to 11° above normal. Extremes 33°; 88°. Rainfall 0.87 in. south central to 3.62 in. east central.

Days suitable for fieldwork: 2.3. Soil moisture supplies: 3% short, 9% adequate, 88% surplus. Corn 3% planted, 1% 1991, 1% avg.; 0% emerged, 1% 1991, 0% avg. Rice 1% planted, 1% 1991, 1% avg. Spring plowing 12% complete, 5% 1991, 7% avg. Sugarcane 51% fair, 49% good. Limited herbicide spraying, off-barring and shaving, wet. Wheat 11% poor, 54% fair, 35% good; 1% headed, 1% 1991, 0% avg. Limited fertilizing and herbicide spraying, wet. Livestock 5% poor, 58% fair, 34% good, 3% excellent. Pasture 24% very poor, 2% poor, 9% fair, 65% good. Vegetables 4% very poor, 26% poor, 66% fair, 4% good. Crawfishing remained active. Planting sweet potatoes for vines continued slowly, wet.

MARYLAND & DELAWARE: MARYLAND: Precipitation 0.22 in. Temperature 45.6°, normal 39.7°. Extremes 16°; 77°.

Activities: Planting peas; buying seed & fertilizer; active preparation for spring planting; marketing, caring for livestock; checking on newborn livestock; cutting firewood. DELAWARE: Precipitation 0.04 in. Temperature 43.3°, normal 40.3°. Extremes 22°; 62°.

Activities: Planting peas; marketing, caring for livestock; buying seed, fertilizer; active preparation for spring planting; marketing, caring for livestock; checking on newborn livestock; cutting firewood.

MICHIGAN: Temperatures 9 to 17° above normal. Extremes 12°; 68°. Precipitation none to 0.95 in.

March weather came in "like a lamb" with warm temperatures, very little rain, some fog. Calving was increasing; there was good weather for moving cattle, feed supplies were good. Major activities included: burning brush; pruning grapes, apples; planting cherry trees; caring for livestock.

MINNESOTA: Temperatures 14 to 20° above normal. Extremes 15°; 71°. Precipitation 0.40 to 1.17 in., which is 0.09 to 0.93 in. above normal.

Greatest weekly total 1.40 in. at Canby. Snowfall none to 2 in. Snow depth at weekend averaged 10 in. in the northeast, north central, 2 in. in the southwest, none elsewhere.

MISSISSIPPI: Weather data not available.
Days suitable for fieldwork 3.0, 1.3 1991, 1.8 avg. Soil moisture 3% short, 52% adequate, 39% surplus, 6% excessive. Corn 6% planted. Wheat 30% jointing, 13% 1991, 23% 5 year avg.; 42% fair, 55% good, 3% excellent. Hay supply 22% short, 73% adequate, 5% surplus. Feed grain 4% short, 92% adequate, 4% surplus. Livestock 1% poor, 19% fair, 67% good, 13% excellent. Pasture 94% of normal. Activities: land preparation, beginning of watermelon planting with 1% 1991.

MISSOURI: Temperatures 16 to 26° above normal. Rainfall 0.56 in., ranging from less than 0.25 in. east central, southeastern districts to nearly 1.00 in. northwest, north central.
Unseasonably warm weather, several dry days permitted early field work. Farmers fertilizing wheat, beginning tillage operations where dry enough. Oat seeding reported many counties, particularly west central, southwest. Many areas need more drying before fieldwork becomes general.

MONTANA: Temperatures 10 to 20° above seasonal average. Precipitation most areas. South, east plains received most 0.30 in.
Winter wheat 10% poor, 41% fair, 48% good, 1% excellent. Winter freeze damage to winter wheat 41% none, 56% light, 3% moderate. Winter wheat 45% still dormant, 52% greening, 3% green and growing. Spring field tillage work 65%; 19% just started, 16% well underway. Livestock grazing 97% open, 3% difficult. Cattle, calves receiving supplemental feed at 96%, sheep, lambs 89%. Calving 34% complete, lambing 35% complete. Mild weather reducing feed requirements, favorable for livestock care.

NEBRASKA: Temperatures ranged from 12° above normal in the Panhandle to 25° above normal in the east central. Extremes 21°; 79°. Precipitation occurred throughout the week with amounts varying from 0.30 in. in the Panhandle to more than 2.00 in. across the north Plateau.

NEVADA: Two storm systems brought precipitation most areas; northwest 0.20 in.; northeast nearly 0.50 in.; south central, south averaged nearly 1.00 in. Temperatures above normal statewide. Extremes 16°; 75°.
Mild weather allowing some early fieldwork. Alfalfa fields greening up. Major activities: Cleaning irrigation ditches, preparing for spring planting, care, feeding of livestock.

NEW ENGLAND: Precipitation none to 0.70 in. north; 0.40 to 1.05 in. south. Temperatures mid teens to low 30s north, low to high 30s south. Maximum temperatures low 40s north to mid 60s south; minimum temperatures -23° north to mid 20s south.
Major farm activities: General maintenance, tending livestock, moving crops from storage.

NEW JERSEY: Temperatures much above normal. Extremes 23°; 66°. Rainfall 0.58 in. north, central; 0.56 in. south. Heaviest 24 hour total 0.68 in. on 7th, 8th. Estimated soil moisture, in percent of field capacity, averaged 100% north, 99% central, 95% south. Four inch soil temperatures 38° north, 39° central, 44° south.
Farmers caring for livestock; repairing equipment; preparing for spring planting.

NEW MEXICO: Unusually warm temperatures continued across all of New Mexico despite a series of upper level storm systems that produced periods of cloudiness, heavy snows in the northern mountains. Temperatures across the plains 8 to 10° warmer than normal, 5 to 7° above normal over the northwestern plateau region. Precipitation maxima: 2.02 in. in the northern part of the State, 1.13 in. southwest.
Days suitable for fieldwork 5.6. Soil moisture 5% short, 90% adequate, 5% surplus. Crop conditions: Alfalfa, 33% fair, 67% good. Irrigated wheat, 29% fair, 71% good with 65% being grazed. Dryland wheat, 30% fair, 70% good with 72% being grazed. Lettuce, onions both good, onion transplants still going in. Cattle, sheep fair to excellent. Range condition 89% of normal.

NEW YORK: Drier than normal in most areas. However, heavy precipitation fell in western Adirondacks, St. Lawrence Valley. Amounts varied from less than 0.25 in. to near 2.00 in. After a chilly start the air warmed up. Temperatures above normal in west, near normal in east.
Major activities: Caring for livestock, winter chores, attending meetings, maintenance work. Maple syrup season underway as warm weather was conducive to sap flows in many areas.

NORTH CAROLINA: Unseasonably warm temperatures, scattered thunderstorms. Extremes 34°; 74°. Precipitation 0.08 to 5.51.
Days suitable for fieldwork 4.8. Soil moisture 3% short, 92% adequate, 5% surplus. Crop condition: Wheat 15% fair, 79% good, 6% excellent; Oats 12% fair, 85% good, 3% excellent; Barley 15% fair, 82% good, 3% excellent; Rye 14% fair, 83 % good, 3% excellent; Pasture 10% poor, 38% fair, 51% good, 1% excellent; Tobacco plant beds 1% poor, 17% fair, 80% good, 2% excellent. Irish potato planting 38%, 23% 1991, 21% avg.; Cabbage planting 44%, 23% 1991, 26% avg. Hay, roughage supplies 1% short, 94% adequate, 5% surplus. Feed grain supplies 3% short, 95% adequate, 2% surplus. Livestock feed from pastures 30%. Activities: Land preparation; preparing and seeding tobacco plant beds; topdressing small grains, pastures; planting Irish potatoes, cabbage; tending livestock; pruning fruit trees; repair and maintenance.

OHIO: Warm southerly breezes introduced the warmest air of the season along with some Gulf moisture. The unusual warmth forced some blooming of plants, increased greening of winter wheat. Daytime highs 50s far north with 60s elsewhere. Some low 70s for average highs far south. Nighttime lows upper 30s to near 50° south. Average temperatures of 41° far northeast to 61° southwest were 13 to 20° above normal. Extreme highs 60° north to near 80° south. Precipitation was seasonable, benefiting soil moisture levels which remain low due to a dry winter and the droughty summer of 1991. Rainfall 0.30 to 0.50 in. west central, northwest to near 2.00 in. south central, southwest. Elsewhere, 0.50 to 1.00 in. or rain was common.
Soils warmed under the abundant sun, warm breezes with average soil temperature readings in the mid 40s to lower 50s.

OKLAHOMA: Temperatures 15° above normal south central to 21° above northeast. Precipitation 0.26 in. Panhandle to 1.75 in. south central.
Days suitable for fieldwork 5.1. Topsoil 5% short, 59% adequate, 36% surplus. Subsoil moisture 100% adequate. Pasture, range 86% normal. Wheat 25% jointing, 7% 1991, 8% avg.; good. Continued mild weather favorable for rapid growth of wheat. Cattle good; marketings above normal; prices mixed.

OREGON: Temperatures above normal statewide. Statewide temperatures 4 to 8° above normal. Precipitation minimal statewide. Western areas 0.50 in.; 0.33 in. eastern areas.
Soil moisture, mostly adequate western areas; short to adequate eastern areas. Winter wheat condition, fair to good. Winter wheat, mint, hay fields beginning to green up. Some cheat grass, Russian wheat aphid problems reported. Some

spring wheat being planted. Orchard, grape, nut pruning continued. Fruit, nut trees budding. Raspberries planting beginning. Livestock mostly good. Pastures dry eastern areas, good western areas. Calving, lambing continue. Range, pasture, poor to fair eastern areas; good to excellent western areas.

PENNSYLVANIA: Much above normal temperatures with below normal precipitation. Temperature 45°, 16° above normal. Extremes 15°; 78°. Precipitation 0.56 in., 0.11 in. below normal.
Activities: Repairing fence; hauling manure; maintaining machinery; caring for livestock.

PUERTO RICO: Island rainfall 0.32 in. was 0.22 in. below normal. Highest rainfall 2.96 in. Isabela Aes, 0.83 in. Rio Piedras Aes. Divisional temperatures 76°; on the coast, 72° in. interior. Mean station extremes 65° at Adjuntas Aes to 78° at San Juan. Extremes 47°; 92°.

SOUTH CAROLINA: Temperatures 11 to 13° above normal. Rain 2.25 in. mountains to 0.63 in. east.
Farm activities: Tobacco bed fair; corn planting underway; small grain very good; peaches blooming; livestock very good.

TENNESSEE: Southerly winds, unusually warm air all week. Temperatures averaged 15° above normal. Highest reading 81° at Memphis on 8th. Several daily record highs set. Lowest reading was 31° in Bristol on 2nd. Relatively dry week. Rainfall 1.00 in. below normal western half of State, 0.75 in. below normal eastern half. Light precipitation fell on 6th.
Soil moisture supplies short to adequate statewide. Winter wheat in mostly good to excellent condition. Yields are expected to be better than previously anticipated. Additional fertilizer is being applied due to expected high yields and favorable prices. Fruit trees are budding out statewide. Some corn being planted, although quite early for the region. Considerable plowing completed, much land preparation still underway. Favorable conditions last week for tilling. Growers note heavy insect populations as they prepare for planting. Tobacco bed preparation continues at rapid pace. Some areas need rain. Hay, roughage supplies adequate. Grasses continue to green. Weeds are already flourishing. Livestock good to excellent.

TEXAS: Heavy rains east Texas. This lead to more flooding problems since most areas already wet. Temperatures remained mild last week. Rainfall departures above normal all areas except the Lower Rio Grande Valley. The largest departures were in Upper Coast, East Texas.
Crops: Small grains continued to show good progress most areas. Warmer weather promoted excellent growth. Fields in Plains, Blacklands beginning to joint. Rust, insect problems light to moderate. Some fields need nitrogen application. A few fields in Blacklands did receive topdressing of nitrogen. More sunshine needed to continue progress. Livestock being pulled off fields for harvest. Statewide wheat condition is rated at 86% of normal compared with 63% last year. Corn, grain sorghum planting in full swing most parts of Valley. Some limited planting occurred South Central, South Texas. A few corn fields planted on higher ground in Blacklands. Corn 4% planted, 18% 1991, 13% avg. Grain sorghum 3% planted, 8% 1991, 5% avg. Cotton planting gained momentum in Rio Grande Valley, with some occurring South Texas. Most fields in Coastal Bend still too wet for much activity. Cotton 1% planted, 2% 1991, 1% avg. Sugarcane harvest resumed in Valley after several weeks of delays.
Commercial Vegetables: In Rio Grande Valley, most onion fields look good; however, excessive rains caused some disease. Melons progressing well. Harvest still light carrots, cabbage, broccoli, cauliflower. Citrus groves in full bloom; producers very optimistic about next season's crop. In San Antonio-Winter Garden, watermelon planting winding down. Wet conditions continued slow progress. Harvest operations slow. In High Plains, land preparations resumed with some planting expected soon. In East Texas, wet conditions limited all progress. Peaches full bloom many areas. Producers Central Texas concerned about lack of chill hours.
Range and Livestock: Range and pasture conditions remained very good. Scattered pastures East Texas very wet. Small grains providing excellent forage. Livestock being taken off fields for harvest. Some bloat occurred stockers. Many producers continued feed wetter areas. Weight grains been good. Milk production fluctuated with wet weather.

UTAH: Precipitation moderate to heavy in southwest, south central; light elsewhere. Temperatures 8.5° above normal.
Activities: machinery repair, building maintenance, purchasing supplies, care of livestock, planting onion fields.

VIRGINIA: Temperatures 10 to 18° above normal. Extremes 19°; 82°. Rainfall was widely scattered, mainly confined to the south, southwest.
Days suitable for fieldwork 4.0. Topsoil 10% short, 85% adequate, 5% surplus. Pasture 9% very poor, 15% poor, 39% fair, 36% good, 1% excellent. Alfalfa 16% poor, 51% fair, 33% good. Barley 20% poor, 37% fair, 35% good, 8% excellent. Wheat 11% poor, 46% fair, 38% good, 5% excellent. Oats 25% poor, 50% fair, 23% good, 2% excellent. Tobacco plantbed 49% fair, 38% good, 13% excellent. Tobacco plantbeds 75% seeded. Potato planting about 5% complete. Peach trees mostly fair. Bud development earlier than normal causing concern with late season frost, freeze. Producing Maple syrup, liming, fertilizing, top dressing, pruning fruit trees, seeding tobacco plantbeds.

WASHINGTON: Temperatures 6 to 8° above normal west; 2 to 7° above normal east. Precipitation 0.37 to 0.89 in. west; 0.03 to 0.37 in. east.
Days suitable for fieldwork 3.2. Soil moisture 8% short, 74% adequate, 18% surplus. Hay, other roughage 17% short, 65% adequate, 18% surplus. Range, pasture 5% very poor, 5% poor, 30% fair, 50% good, 10% excellent. Winter wheat 22% fair, 78% good. Winter barley 8% fair, 92% good. Midweek rains slowed farming activities in the west; however spring wheat, barley planting continued. On early fruit trees, buds swelling. Pruning, orchard clean up was nearing completion. Winter wheat stands continued developing; overall, conditions remained good with a high degree of optimism for this year's crop. Ranges were greening, growing as calving, lambing continued.

WEST VIRGINIA: Temperature 55°. Extremes 25°; 83°. Precipitation 1.06 in.
Days suitable for fieldwork 4.5. Soil moisture 4% very short, 8% short, 80% adequate, 8% surplus. Wheat good. Barley good. Hay feed supplies adequate. Other feed supplies adequate. Cattle good. Sheep good. Cows calved 49%. Sheep lambed 53%. Activities: plowing, preparing tobacco beds, fencing, calving, lambing.

WISCONSIN: Temperature 39°. Extremes 20°; 67°. Temperatures above normal causing much of the snow to melt. Precipitation came in the form of light rain, occasional thunderstorms on the 3rd, 5th, 6th, 7th. Snow depth for mid March was 1.5 in.; 3.1 in. 1991; 7.6 in. average. Frost depth 7.6 in.; 13.7 in. 1991; 16.2 in. average.

WYOMING: Statewide temperatures were mostly above normal with very little precipitation.
1992 Winter wheat fair to good. Some drought stress, winter kill reported. Livestock mostly good. Calving, lambing continuing. Supplemental feeding continuing.

International Weather and Crop Summary
HIGHLIGHTS

March 1 - 7, 1992

FORMER USSR: Bitter cold covers winter grains protected by snow in the east. Unseasonably warm weather favors crops in the west.

EUROPE: Mostly dry, mild weather promotes early spring fieldwork in the south.

EASTERN ASIA: Warmer temperatures prompt winter wheat to break dormancy and beneficial showers aid early growth.

SOUTHEAST ASIA: Unseasonably heavy rain hits northern Thailand.

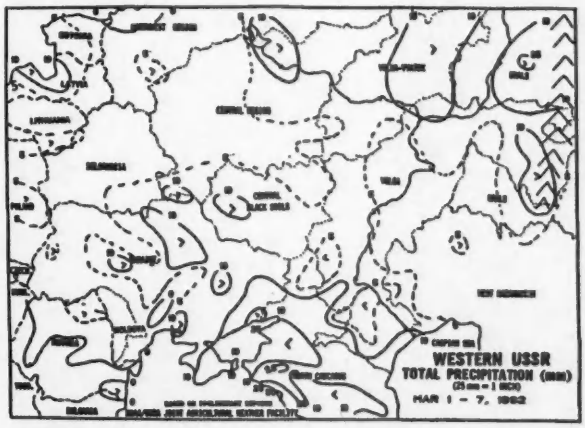
SOUTH ASIA: Dry, warm weather favors winter crop growth in Pakistan and India.

SOUTH AMERICA: Heavy showers aid Brazilian soybeans, while cooler temperatures favor Argentina's summer crops.

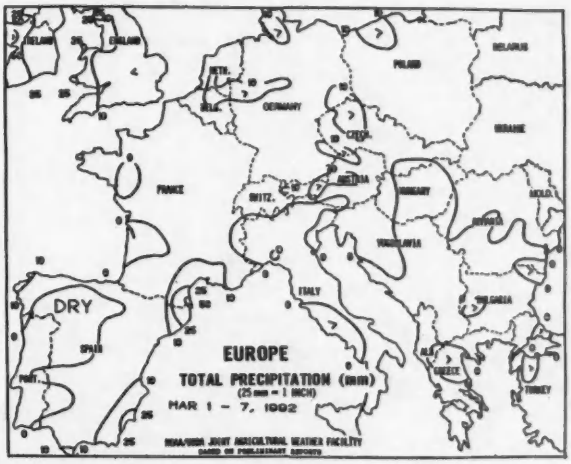
AUSTRALIA: Heavy showers aid sugarcane and summer crops but also cause possible flooding.

NORTHWESTERN AFRICA: Lesser amounts of rain follow last week's beneficial showers over winter grain areas.

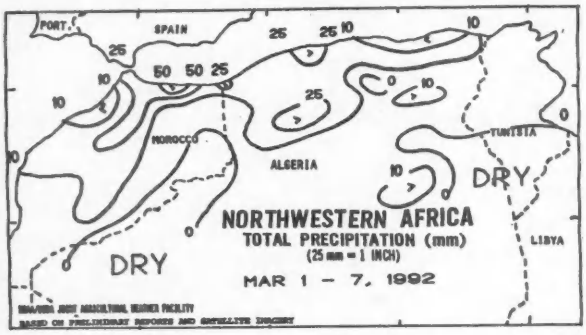
SOUTH AFRICA: Drier and warmer weather returns to eastern corn areas.



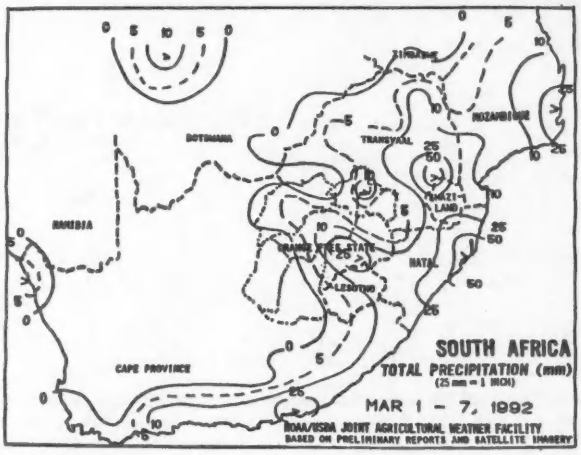
FORMER USSR: Bitter cold continued over winter grains in the eastern portion of the Central Region, Volga Vyatsk Region, Volga Valley, Black Soils Region, the extreme eastern Ukraine, and the northern tip of the North Caucasus. Minimum temperatures from February 23 to 26 ranged from -16 to -29 degrees Celsius (C) in these areas, with isolated locations experiencing temperatures below -30 degrees C. Although temperatures exceeded the threshold for potential winterkill, moderate to deep snow cover provided adequate protection from widespread winterkill. By February 27, temperatures began to moderate over the region, easing stress on crops. During the week, light precipitation (1-10mm) prevailed over most winter grain areas with greatest amounts of moisture covering Belorussia, Northwest Region, and the western portion of the Central Region. While unseasonable cold prevailed over eastern areas, crop areas in the west experienced unseasonably mild weather, with weekly average temperatures ranging 3-7 degrees C above normal.



EUROPE: Light showers (less than 10mm) covered northern and eastern crop areas, while scattered showers prevailed in the west. Significant moisture (10-25mm or more) was confined to extreme southeastern France and the southern tip of Spain. Dry weather continued over the northern Iberian peninsula, much of France, Italy's Po Valley, and Greece. Average maximum temperatures in the 10-15 degrees C range across southern Europe stimulated early spring fieldwork and induced winter grains out of dormancy. Milder-than-normal weather also prevailed in the east, but weekly average temperatures below 5 degrees C in eastern Europe kept winter grains dormant. Timely spring moisture will be needed across the continent as the spring growing season gets underway.

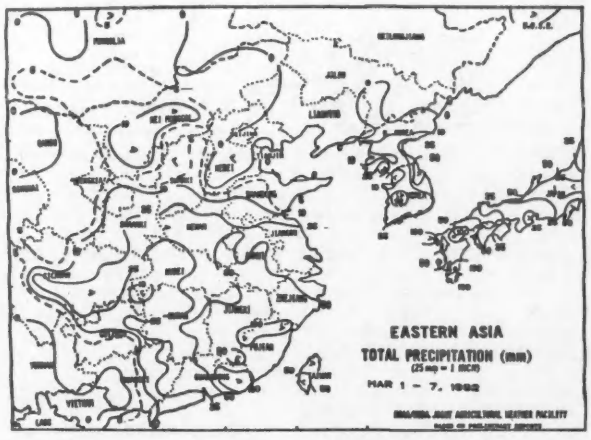


NORTHWESTERN AFRICA: In Morocco, beneficial precipitation (10-20mm) continued to cover winter grain areas from Casablanca northward through Meknes. In contrast, adverse dryness continued over crop areas south of Casablanca, further lowering yield prospects for southern winter grains approaching reproduction. In Algeria, light precipitation (1-10mm) followed last week's favorable rainfall, especially in central and eastern areas. In Tunisia, rainfall ranged from 3 to 10mm, with greatest amounts of moisture (25-50mm) falling to the east of the principal growing areas. Winter grains over the region are approaching the heading stage, when moisture conditions become most critical in determining yield prospects.

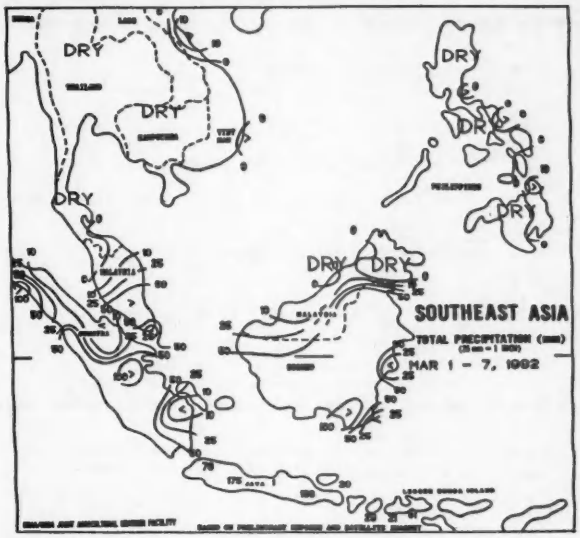


SOUTH AFRICA: Following last week's beneficial rain, drier and warmer weather returned to eastern corn areas, with only local reports exceeding 25mm. High temperatures in the east were mostly in the low to mid 30's C, but unusually hot weather (highs in the low to mid 40's C) was unfavorable for corn on the eastern fringes of the growing area. Further west, poor growing conditions continued as rainfall failed to reach 10mm in all but isolated areas. Highs in the west averaged in the low to mid 30's C. Beneficial rain (10-34mm) covered primary grain areas of eastern Cape Province and Natal and heavier rainfall (25-97mm) doused coastal fruit crop regions of the southern Cape. However, rainfall was unfavorably light (4-16mm) over Natal's sugarcane region.

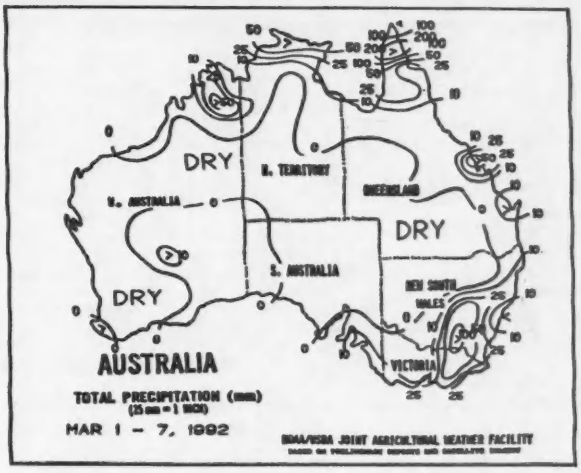
SOUTH ASIA: Seasonably dry, warm weather benefited growth of reproductive to filling grains and oilseeds over most winter crop regions of India and Pakistan. In the east, scattered showers (1-29mm) fell over rice areas from Orissa to Assam. Dry, warm weather dominated southern India, typical of this time of year. February and March are climatologically two of the driest months of the year in southern India.



EASTERN ASIA: Unusually warm temperatures across the North China Plain prompted winter wheat to break dormancy in most areas. Light to moderate rain (7-35mm) fell across Henan and Shandong, aiding early spring growth. Due to dryness during fall planting, abundant rains are needed to ensure adequate wheat growth and development. Variable showers (20-60mm) fell across extreme southern China, aiding irrigation levels for early rice transplanting, but delaying winter crop harvesting. Weekly temperatures averaged 6-8 degrees C above normal across the North China Plain.



SOUTHEAST ASIA: Unseasonably heavy rain (15-50mm or more) covered Thailand's northern and northeastern rice areas and, as indicated from satellite imagery, northern Laos and northern Vietnam. The rainfall will improve local reservoir levels and, especially along the Chao Phraya and Mekong Rivers, boost irrigation reserves for dry season rice. Further south, light to moderate rain (10-41mm) fell along the Malay Peninsula, with 3-20mm reported in western Malaysia's primary crop regions. Rainfall was highly variable elsewhere in Malaysia and Indonesia, but seasonable showers (41-180mm) in western Java boosted reservoirs for rice cultivation. In contrast, unseasonably dry weather persisted over the Philippines, with only isolated locations receiving more than 25mm. This is the third consecutive dry winter in a row for the eastern Philippines, which typically receives 25-100mm per week in February alone.



AUSTRALIA: Heavy tropical showers (77-143mm) covered northeastern Australia benefiting sugarcane. The rains also spread southward into the eastern summer crop areas, with extremely heavy rain (greater than 200mm) reported in southeastern Queensland. The excessive rains caused local flooding and possibly damaged reproductive to maturing cotton and sorghum. However, the southern summer crop area in northern New South Wales, where moisture is becoming limited, received only light to moderate rain (4-20mm). Cotton harvesting usually begins by late March. Weekly temperatures averaged 1-2 degrees C below normal across the major eastern crop areas.

SOUTH AMERICA: In southern Brazil, moderate to heavy showers (60-146mm) spread from Parana to Rio Grande do Sul, aiding pod-filling soybeans and maturing corn, but possibly causing some flooding. The northern soybean regions of Minas Gerais, Goias, and Mato Grosso do Sul received light to moderate rain (18-40mm), which continued favorable growing conditions. Sao Paulo received beneficial rain (10-40mm) favoring cotton, sugarcane, and citrus. Cooler temperatures prevailed across central Argentina, benefiting reproductive to filling summer crops. Rainfall was mostly light (less than 10mm) in the main crop areas, but adequate soil moisture still remains. Southern Paraguay received moderate to heavy rain (50-100mm), aiding soybeans and cotton. Weekly temperatures averaged slightly below normal across the major crop areas of Argentina and southern Brazil.

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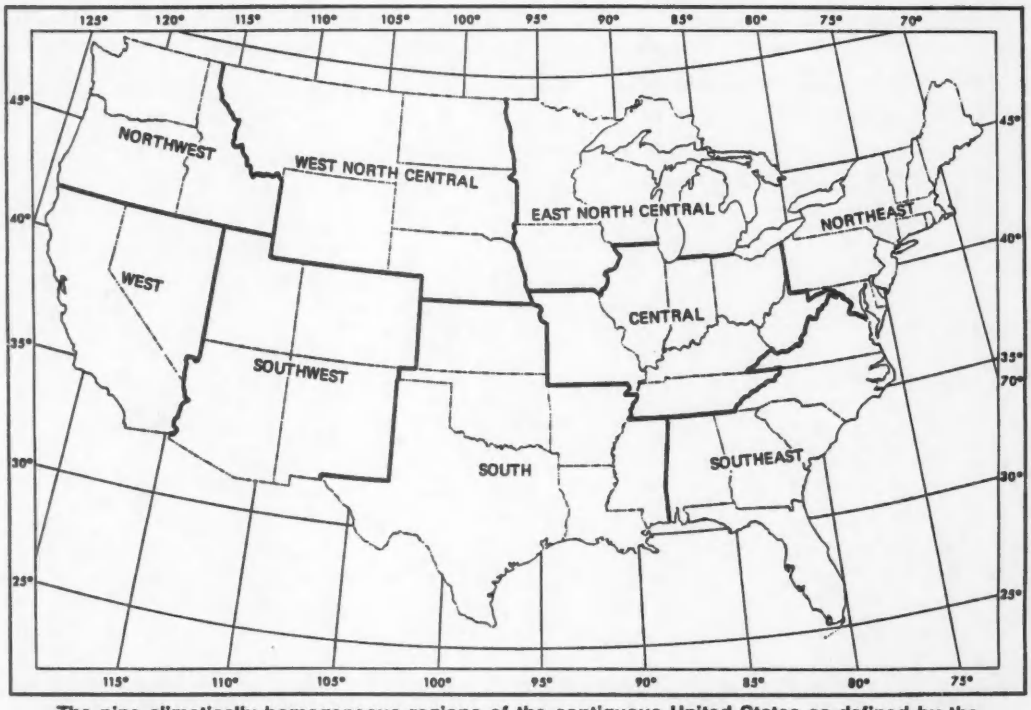

The nine climatically homogeneous regions of the contiguous United States as defined by the National Climatic Data Center (NCDC).

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